

STATE, OF WASHINGTON PUGET SOUND REGIONAL COUNCIL

In the Matter of;

Expert Arbitration Panel's Review of Noise and Demand/System Management Issues at Sea-Tac International Airport

FINAL ORDER ON PHASE II DEMAND/SYSTEM MANAGEMENT ISSUES

December 8, 1995

This is the Expert Arbitration Panel's Final Order on Demand/System Management Issues, In our July 27, 1995 Order, we determined that congestion pricing, gate controls and "high speed" rail ate not "feasible" programs of demand or system management, within the unique meaning of Puget Sound Regional Council ("PSRC") Resolution A-93-03, because we were not confident that they could be implemented in a way that could reasonably be expected to obviate or defer the need to construct the third runway. We found that "high speed" rail was not "feasible" within the meaning of the Resolution only because it could not be achieved within the limited time frame contemplated by the Resolution. We were unable, however, to determine, based upon the evidence presented to us, whether more readily achievable improvements in existing rail service connections to the principal short-haul markets served by Sea-Tac - Portland and Vancouver - are "feasible" within the narrow meaning of the Resolution. As a result, we convened a fourth round of hearings on the rail option on November 20, 1995,

We have now determined that more readily achievable improvements in existing rail service cannot reasonably be relied upon as a justification for obviating or deferring construction of the new runway at the Airport, even though these improvements, if achieved, are likely to produce significant benefits to the Region. We have concluded, therefore, that the rail option is not "feasible" within the meaning of the Resolution, and, consequently, that the Port of Seattle (the "POS") and the Washington State Department of Transportation ("WSDOT") have satisfied the demand/system management condition of the Resolution. We have laid out below both the reasons why we have reached this conclusion and the reasons why, as experts in the field, we nevertheless continue to believe that significant rail improvements in rail service can and should be made. We therefore encourage the POS and WSDOT aggressively to pursue improvements in the existing rail service in the Region,

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W@ explained in out, July 27, 1995 Order that, based upon the evidence offered to us in e past, we had been unable to determine whether more readily achievable improvements in existing rail service connections to the principal short-haul markets served by Sea-Tac Portland and Vancouver - are "feasible, " and therefore must be pursued and achieved to satisfy a condition for the PSRC's approval of the construction of the new runway in April 1996. We noted that there are some facts and circumstances which suggest that improved rail service along the Portland-Seattle-Vancouver corridor using existing

railroad rights-of-way could have a significant impact on the level and pattern of aircraft operations at Sea-Tac and might allow the POS to defer construction of the third runway without suffering unacceptable amounts of delay at the Airport. We postulated that if improved rail service along the Portland-Seattle-Vancouver corridor induced even a relatively small number of airline passengers to switch to rail, and if the resulting reduction in aircraft load factors caused the airlines to eliminate some of their peak period operations, there could be a significant reduction in the levels of delay experienced at Sea-Tac, which could defer the need for the new runway. We asked all participants in this „arbitration" to provide input to us on these points.

In anticipation of our November 1995 hearing, we received formal position statements and evidentiary materials from the POS, WSDOT and the Regional Commission on Airport Affairs ("RCAA"). The Airport Communities Coalition ("ACC") submitted a statement of position, without any supporting evidence. In addition, we received comments on the tail option from Air Washington and the Airport Noise Group. The airlines serving Sea-Tac once again declined to appear before the Panel and did not offer us any new information. This is regrettable because delays at the Airport should be a major focus of concern and innovative thinking for the airlines.

Both the POS and WSDOT urged us to find that the rail option is not feasible because improvements in existing rail service cannot be assured and because their impact upon passenger behavior, aircraft operations and airfield delay is unlikely to be sufficient to justify deferring construction of the third runway. This view was supported by Air Washington. At the hearing on the rail option, Michael Feldman was the lead representative of the POS, The WSDOT was represented by Charlie Howard and Renee Montgelas.

The RCAA and ACC disputed the positions of the POS and WSDOT, claiming that improvements in rail service should be made, and that they could be expected to divert enough air passengers to cause a reduction in aircraft operations during peak periods and, as a result, a reduction in the airport delays that are offered by the POS as its justification for constructing the new runway. Dr. Hal B.H. Cooper, Jr, submitted a thorough and well-articulated analysis of these points and testified for the RCAA,

The RCAA and ACC claimed that the rail option, if pursued and achieved, would postpone any need to construct the runway and is, therefore, "feasible" within the meaning of the Resolution. Their views were supported by the Airport Noise Group. No party, however, offered any persuasive arguments or evidence that the rail alternative, if pursued and achieved, would eliminate the need to construct the runway sometime in the future.

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We were left then, with responsibility to determine whether readily achievable improvements in existing rail service could reasonably be expected to alleviate the peak period delays at Sea-Tac for long enough

to warrant a decision to defer construction of the runway,

Analysis.

Before turning to the rationale of our feasibility determination, we want to reiterate some of the introductory comments we offered in our July 27, 1995 Order. The Panel does not believe that it has been charged with generalized responsibility for determining whether there is a need to build the proposed third runway. The Resolution, in fact, appears to us to manifest a determination by the PSRC that the runway is needed and should be approved unless we find that its construction could be deferred or obviated by the use of demand or system-management programs. We nevertheless continue to have questions about the complex and dynamic delay and capacity problems that are seen by the POS as justifying the construction of the new runway. We therefore do not express any opinion about whether the POS has shown that the proposed runway is needed.

We do note, however, that there appears to be no dispute that the volume of aircraft operations at the Airport has begun to grow rapidly due to the introduction of a new carrier, and that some continuing growth is to be expected. At the same time, there also appears to be no dispute that the effective capacity of the airport (its "acceptance rate") during adverse weather conditions has been increased in recent years through the introduction of a variety of technological and operational improvements, and that future developments are likely to continue to enhance the capacity of the existing runways. The POS itself admits that under current conditions, the operational delays experienced at the Airport are very sensitive to small changes in the level of peak operations. We are, as a result, uncertain about how grave the delay problems at Sea-Tac will turn out to be over the next five or ten years, and hence uncertain about how large an impact the rail option would have to have in order to justify deferring approval or construction of the new runway,

We save, however, an obligation as members of the Panel to render a decision based upon the evidence that has been presented to us, in spite of our uncertainty. In discharging this responsibility, we have considered the consequences of error on our part. If we reject the runway on the basis of the rail option, and as result it is not built, there is a significant risk that the Region will find itself facing intractable delays at the Airport within a decade even if the rail option has some effect upon peak period operations at Sea-Tac. If, however, we find that the rail option is not "feasible" under the Resolution, and thus need not presently be pursued and achieved before the PSRC approves the runway, the risk is that the runway will be built some time before it is needed.

There are four reasons why we have determined that the rail option cannot reasonably be relied upon as a justification for deferring construction of the proposed runway at the Airport.

Most importantly, we are not confident that the state funding required to implement even the modest improvements in rail service relied upon by the RCAA will be available on a timely basis. Neither the POS nor the WSDOT has the ability to make these improvements without

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legislative action, and there is substantial doubt that the required support will be offered and maintained by the legislature. This is an unfortunate outcome, in the Panel's view. We continue to believe that long-term investments in improved rail service will yield substantial dividends to the citizens of this Region.

If we were confident that the state legislature would appropriate the required funds, the question of whether modest improvements in rail service might permit the POS to defer construction of the third runway would be difficult for the Panel to resolve. Recent enhancements in rail service have been very well received by the public, and continuing improvements are likely to increase ridership significantly, even among business travelers. (We note that compared to short-haul air travel, rail offers some competitive advantages for business travelers: lower cost, all-weather reliability, easy downtown-to-downtown access, more room to work en route and other amenities.)

Based upon the evidence presented to us, however, we cannot reliably predict that significant numbers of business travelers will switch from air to rail for their peak period trips if only readily achievable improvements in rail service along the Portland-Seattle-Vancouver corridor are made. As we indicated during the November 20 hearing, the appropriate standard for air-rail comparisons is total trip time, not merely flight and track time. Depending upon the passenger's points of origin and destination, and the severity of airport delays on the ground and in the air, the actual time differential between air and rail travel can vary considerably. On balance, however, the available data suggest that near-term rail improvements are not likely to eliminate the total trip time advantage of air travel. As the RCAA acknowledges, peak period business travelers tend to be particularly time sensitive, and they are less likely than leisure travelers to alter their behavior in response to marginally improved rail service.

Moreover, we are not confident that reasonably expected levels of diversion of passengers from air to rail during peak periods will have a significant impact on the level or pattern of peak period aircraft operations at the Airport. Airline decision making is difficult to predict, and does not always conform to rational economic theory. Even if many business travelers do alter their behavior and take the train along the Northwest Corridor, the airlines may well continue to operate a pattern of peak period flights to and from Sea-Tac that is very similar to what occurs today.

Finally, we are not able to say, based on the evidence presented to us, that foreseeable changes in peak period aircraft operations attributable to the diversion of passengers from air to rail can be relied upon to reduce delays at the Airport to acceptable levels in future years.

Accordingly, we have determined that the rail option is not "feasible" within the narrow meaning of the Resolution.

We continue to believe, however, that improvements in existing rail service should be pursued by the,

POS as well as by the WSDOT and community advocates who seek wise solutions to the growing transportation needs of the Pacific Northwest. It is clear to us that short-term improvements in rail service, followed later by the introduction of true "high speed" rail, are in the best interests of the Region. The experience in the Northeast Corridor, to say nothing of Western Europe and Japan, shows that efficient rail service can displace substantial

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amounts of travel both in the sky and on the highways. In fact, the remarkable, and unanticipated, success of recent improvements in service between Seattle and Vancouver (the "Mt. Baker" train) and between Seattle and Portland (the "Mt. Adams" and "Mt. Rainier" trains) - achieved under adverse conditions with only marginal reduction in trip times for the "Mt. Baker" and no change in trip times on the Portland trains - demonstrates the potential benefits of enhanced rail service in @s Region. If, for whatever reason, the POS is unable to build the third runway, improved rail service will be essential to the Region.

The POS, as manager of both the Airport and the Seaport, should join WSDOT in educating the state legislature about the enormous value of long-term investments in rail improvements, both to serve the traveling public and, as Hal Cooper emphasized, to maintain competitive cargo service to and from the Port of Seattle. The POS should also begin to work with the airlines at the Airport to develop creative solutions to persistent problems of congestion and delay, and should encourage the airlines to forge alliances with rail operators to provide swift and efficient intermodal transportation services to the Region.

Closing Comments.

We have now completed our consideration of Demand/System Management Issues. As w@ said in our July 27, 1995 Order, our orders should not be read as the final word on the demand and system management issues that we have addressed, Our charge under the PSRC Resolution is limited, We were not appointed to determine whether the need for the third runway has been established or whether a combination of improvements in air traffic control, in airport and airline management and in regional transportation infrastructure could defer or obviate the need to build the proposed third runway at Sea-Tac.

We continue to believe that "congestion pricing" is an important tool that could improve the efficiency of the use of scarce airfield resources in Seattle, and therefore deserves careful study by the POS and the airlines. "Gate controls" could also lead to improved airfield efficiency, and hence fewer delays, if they induced airlines to reduce the number of aircraft operations they use to serve a given flow of passengers. Improvements in technology, including LDA, can be expected to enhance the effective capacity of the airfield at Sea-Tac. We are confident that "high-speed" rail would produce a very substantial diversion of

travelers from air to rail transportation in the Portland-Seattle-Vancouver corridor,

We therefore continue to encourage the POS, the WSDOT, the FAA, the airlines and the public to persist in their rigorous examination of the planning assumptions that underlie the proposal to build the runway and to continue their efforts to determine whether adequate

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solutions to the problems of capacity and delay can be found without building a new runway at Sea-Tac.

Scott P. Lewis, Chair

William Bowlby

Martha J. Langelan