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PRIVATIZING LOS ANGELES INTERNATIONAL AIRPORT: Analyzing the Alternatives

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EXECUTIVE SUMMARY

Over two dozen countries, ranging from Britain to Vietnam, are privatizing their airports. Some are selling 100 percent, others a part-interest. Some are leasing out existing airports; others are using long-term leases to permit private development and operation of new terminals or entire new airports. The worldwide privatization movement aims to improve the efficiency and increase the value of formerly state-owned enterprises.

Los Angeles International (LAX) would be more valuable if it were privatized. Britain's privatized airport company, BAA, increased in value from $2.5 billion to $4.3 billion in its first five years in the private sector—an annual increase of approximately 11.5 percent. Yet the City of Los Angeles's recent airport privatization study by Babcock & Brown assumed that privatization would make no difference in airport revenues, expenses, or efficiency compared with City ownership.

This report revisits the Babcock & Brown analysis, making conservative assumptions about the differences that privatization would make in the operations of LAX over the next 30 years. It then recalculates the net present value (NPV) to the City of selling or leasing LAX, compared with hypothetical City for-profit operation. This calculation uses a more theoretically supportable and empirically proven discount rate and takes into account all revenue flows, including incremental sales and property tax revenues. The result is that the NPV of a 30-year lease would be $3.7 billion, the NPV of a sale would be $2.2 billion, compared with a NPV of $2.13 billion for City operation for profit.

Legal analysis reveals that the lease and sale options are clearly feasible, thanks in part to the recent federal Executive Order on Infrastructure Privatization. But for-profit operation by the City faces formidable legal barriers. Federal law forbids cities to take profits off public airports, and under California's Prop. 13 and 62, fee increases at LAX could be construed as tax increases requiring a two-thirds vote of the electorate. Hence, leasing LAX is both more attractive financially and more feasible to bring about than for-profit operation by the City.

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I. INTRODUCTION: AIRPORT PRIVATIZATION WORLDWIDEI. INTRODUCTION: AIRPORT PRIVATIZATION WORLDWIDE

The ownership and operation of airports is undergoing dramatic change around the world. Increased private-sector involvement in owning and operating airports is a rapidly growing trend, involving both developed and developing countries. This section of the report provides a very brief overview of this trend, in order to put discussion of the possible privatization of Los Angeles International Airport into context.

A. Airport SalesA. Airport Sales

The originator of the airport privatization trend was Britain. The former British Airports Authority, operator of London's three main airports (Heathrow, Gatwick, and Stansted) and four Scottish airports was privatized in 1987 via a public stock offering. The government sold 100 percent of the company (retaining only a single share with special voting powers), raising $2.5 billion for the Treasury. Those shares today have a market value of some $4.3 billion.

The British government decided on privatization of BAA in 1983, with a target date of 1987. The announcement accelerated the company's transition toward a more commercial style of management. BAA's work-force shrank by several hundred (out of more than 7,000) between 1982 and 1985, and productivity increased steadily. Following privatization in 1987, capital investment doubled as the company expanded terminals and added on-airport hotels. Productivity continued to rise, and the work-force grew by over 1,000 as airport traffic increased. BAA significantly expanded retail (concession) operations at the airports, to the point where revenue from those functions now considerably exceeds revenue from airline and other airfield functions.

Some governments have sold only part-interests in their airports. For example, in 1989 Liverpool, England sold a 76 percent interest in its airport to British Aerospace. Belgium created a corporation to own the Brussels airport terminal and sold 52 percent to financial institutions, to raise capital for a new, larger terminal facility. The Austrian government sold a 28 percent interest in the Vienna airport in June 1992 to raise capital for airport expansion; the issue was oversubscribed, indicating considerable demand for airport shares.

Several other governments have announced plans to sell part or all of their airports. The government of Denmark plans a public stock offering for 25 percent of the Copenhagen Kastrup airport in 1993, and may sell additional shares later. New Zealand has corporatized its three international airports and plans to sell at least Auckland International. The United Kingdom has announced plans to sell the Belfast International Airport in Northern Ireland. Malaysia and Singapore are corporatizing their airports and plan to sell them within the next five years. And Argentina has announced plans to privatize both major airports serving Buenos Aires.

A number of governments have announced studies on airport privatization. Australia is studying the

possible sale of 23 airports owned by its profitable Federal Airports Corporation. Spain is considering selling 49 percent of the company that operates the country's four main airports. And Taiwan has hired Shearson Global to study the corporatization and privatization of its airports. Table 1 provides a summary of worldwide airport sale activity.

Table 1

AIRPORT SALES WORLDWIDE

Country	Airport
COMPLETED SALES	
Austria	Vienna (28%)
Britain	BAA (Heathrow, Gatwick, Stansted, 4 Scottish)
Britain	Liverpool (76%)
Belgium	Brussels Terminal (52%)
PLANNED SALES	
Argentina	Two Buenos Aires airports
Britain	East Midlands Airport
Denmark	Copenhagen (initial 25%)
Germany	Bonn/Cologne (5%)
Malaysia	All airports
New Zealand	Auckland International
Northern Ireland	Belfast
POTENTIAL SALES	
Australia	23 airports of Federal Airports Corp.
China	Minority stakes in several airports
France	Minority stake in Aeroports de Paris
Germany	Minority stake in Berlin airport firm
Ireland	Air Riante (3 main airports)
Netherlands	Schphol (minority stake)
Philippines	Manila International
Russia	70 Aeroflot airports (40 percent)
Singapore	Changi International Airport
Spain	49% of airports corporation
Sweden	Stockholm (minority stake)
Taiwan	Main airports

SOURCE: Reason Foundation

B. Lease/Develop/OperateB. Lease/Develop/Operate

A broad range of governments are seeking private capital to finance, develop, and operate new airports or airport terminals under long-term leases. These arrangements typically involve a detailed franchise agreement with terms of 30 to 50 years. The lease/develop/operate (LDO) technique has been used for decades in Europe to develop tolled motorways, and its use has spread to developing countries for power plants, toll roads, and other major infrastructure.

One of the first airport LDO projects involved the development of the new international terminal at Toronto's Lester Pearson International Airport, which opened in 1991. Terminal 3, known as Trillium, was developed by a joint venture of Lockheed Air Terminal and Huang & Danczkay, a Canadian development firm. They formed Airport Development Corporation and negotiated a 40-year land lease (with 20-year option) for the 130-acre site. Although Transport Canada had estimated the project would have taken it seven years, ADC completed it in just three years. The $650-million project included designing and building a 29-gate 1.2-million square foot terminal, a 3,300-car parking garage, a 500-room hotel, and five miles of access roads with six overpasses. The terminal was designed with extensive retail space, including a an upscale department store.

The Canadian government recently held an international competition to obtain bids for privatized redevelopment and expansion of its existing Terminals 1 and 2 on an LDO basis. In December 1992 they announced the award of the project to Paxport International, a Canadian firm.

The world's largest LDO airport project is taking place in Greece. The government has narrowed its selection process to two finalist consortia for a $1.5 billion project to finance, develop, and operate a new airport for Athens. The two finalists are teams headed by Hochtief (Germany) and Societe Auxiliaire d'Enterprise (France).

Most of the other proposed LDO projects are in developing countries. Turkey is negotiating with a team headed by Lockheed Air Terminal for a $200 million, 18-gate terminal in Istanbul. Czechoslovakia has selected a consortium headed by Canada's Armbro Enterprises to develop and operate a $167-million new terminal at Prague's Ruzyne Airport. The former East Berlin airport (Schoenefeld) is seeking bids for a major redevelopment and upgrading on an LDO basis. Westinghouse Electric is leading a consortium doing a feasibility study in Russia on a proposed cargo airport in Irkutsk. Hughes Airport Systems is doing a feasibility study in Ukraine on modernizing the four main airports and the air traffic control system. And Vietnam has signed a 25-year LDO franchise with Hong Kong's Champion Investment Ltd. to expand and manage Hanoi's Noi Bai Airport.

In this hemisphere, Mexico and Venezuela have announced plans to privatize all their major airports during 1993, via long-term lease franchises. Montreal-based Aviation Planning Services is doing a feasibility study for a $150-200-million new international airport to serve San Jose, Costa Rica. In the Caribbean, Jamaica has completed a feasibility study on an LDO terminal for the fast-growing Montego Bay airport, and Trinidad is reviewing five proposals for an LDO terminal, with a contract

award expected early in 1993.

Table 2 provides a brief summary of worldwide airport lease/develop/operate activity as of the start of 1993.

Table 2

LEASE/DEVELOP/OPERATE PROJECTS

Country	Airport
FACILITIES IN OPERATION	
Canada	Toronto Terminal 3
England	Birmingham Euro-Hub
PLANNED PROJECTS (Selection Process Under Way or Completed)	
Canada	Terminals 1 and 2
Czechoslovakia	New Prague terminal
Greece	New Athens airport
Hungary	New Budapest terminal
Macao	New international airport
Malaysia	New international airport
Mexico	Lease of all major airports
Trinidad	New terminal
Turkey	New Istanbul terminal
Venezuela	Lease of all airports
Vietnam	New Hanoi terminal
POTENTIAL SALES (Feasibility Studies)	
Costa Rica	New San Jose airport
Ecuador	New airport
Germany	Upgrading E. Berlin Schoenefeld airport
Jamaica	New Montego Bay terminal
Pakistan	New terminals at Islamabad and Lahore
Poland	New Warsaw airport
Russia	New Irkutsk and St. Petersburg airports
Spain	New Madrid airport
Taiwan	New Taipei terminal
Ukraine	Expanding/upgrading four airports

SOURCE: Reason Foundation

C. U.S. Airport PrivatizationC. U.S. Airport Privatization

The first municipality to seek to sell its airport was Albany, New York, in 1989. The Federal Aviation Administration, citing grant agreements requiring all airport revenue to remain on the airport, vetoed Albany's plan, as well as a subsequent proposal for a long-term lease. Because the issue raised issues for which federal aviation policy was unprepared, the FAA convened a special industry/government working group, headed by Donald Reilly, to examine the issues and make policy recommendations. The working group was divided between proponents and opponents, and could not reach consensus. The FAA and its parent agency, the Department of Transportation, spent much of 1990 and 1991 on successive drafts of a policy statement on airport privatization, but no such policy has yet been issued.

Although the FAA rejected Albany's proposed lease arrangement, the agency has previously approved a number of long-term leases, with both private (for-profit) companies and with public authorities. As summarized in Table 3, airports operated under such leases include large and small airports with scheduled airline service, as well as large general-aviation airports. In all of these cases, a net profit is taken off the airport by the lessee. Thus, FAA's rejection of Albany's lease proposal was inconsistent with the agency's own previous practice.

Table 3

U.S. AIRPORT LEASING

Airport	Lease Term	Leaseholder	Airport Operator
Atlantic City International	10 + 15	Johnson Controls World Services	Johnson Controls World Services
Bader Field	10 + 15	Johnson Controls World Services	Johnson Controls World Services
Kennedy International	70	Port Authority	Port Authority
LaGuardia	70	Port Authority	Port Authority
Morristown Airport	99	D.M. Airport Developers	D.M. Airport Developers
Newark International	70	Port Authority	Port Authority
Rickenbacker Field	70	Turner Construction	Lockheed Air Terminal
Teterboro Airport	30	Johnson Controls World Services	Johnson Controls World Services

SOURCE: Reason Foundation

Interest in selling or leasing airports on the part of fiscally stressed governments continued to increase during 1991 and 1992, and a number of feasibility studies and legal assessments were conducted. Besides Albany and LAX, airports where public officials have suggested privatization include Baltimore-Washington International, Boston, Dallas-Love Field, Detroit Metro, Indianapolis, New York's Kennedy and LaGuardia, Palm Beach International, and Peoria.

Although FAA/DOT have yet to issue a policy on airport privatization, two other federal policy statements have been issued. In February 1991, the U.S. Justice Department issued a legal opinion concluding that Albany, New York was entitled to recoup its original investment in its airport in the event of its lease to a private firm.[1] Although this legal opinion had been requested by the FAA, the agency has not issued any subsequent policy guidance based on it.

Of far greater significance was the issuance by President George Bush of Executive Order 12803 on April 30, 1992.[2] This order establishes federal policy in favor of requests by state and municipal governments to sell or lease infrastructure enterprises that have received federal grants, explicitly including airports. Federal agencies are directed by the order to revise their policies to be consistent with its terms. The executive order also spells out a procedure by which grantees are to reimburse the federal government for only a *portion* of the previous federal grant investment in the facility, and sets limits on the uses which a city or state can make of a portion of the proceeds from the sale or lease.

II. LEGAL FEASIBILITYII. LEGAL FEASIBILITY

Under contract to John F. Brown Company, the firm Babcock & Brown, Inc. (B&B) conducted a limited-scope "privatization study."[3] The B&B report presented the alternatives of sale, lease, and City (for-profit) ownership as if all were equally probable of being accomplished, if the City decided that one of these was its preferred option. In fact, sale and lease are significantly more likely to be achievable than for-profit operation under City ownership. The reason stems from federal law and policy.

A. Current Federal Law and PolicyA. Current Federal Law and Policy

Under the Airport & Airway Improvement Act of 1982 and subsequent amendments, *federal law* prohibits a public airport operator from using any profit from an airport for other than airport purposes. Congress included this provision in order to be sure that federal grants made to a public airport would be used only for the airport.

Without this provision, a city could receive a $10-million airport grant and simultaneously transfer $10 million in airport profits to its general fund, thereby in effect converting airport grants into de-facto general revenue sharing. Congress, the FAA, and the aviation user community explicitly intended to prevent such activities by including the airport-revenue provision in the grant legislation.

The situation is quite different, however, for privately owned airports. The airport-grant law was changed in 1982 to permit grants to be made to privately owned airports, with the full understanding that such airports are operated as for-profit businesses. Although privately owned airports are not eligible for one type of grant (entitlement grants), they *are* eligible for

discretionary grants and for noise-related grants.[4] Thus, current federal law permits private enterprise to operate airports for profit, but does not permit governments to do so. And it therefore limits the type and amount of grant funds available to privately owned airports.

Second, the legal feasibility of shifting from traditional (non-profit) municipal operation to (for-profit) private-sector operation was greatly enhanced by the President's Executive Order on Infrastructure Privatization, as previously noted. Aiming to clarify the previous lack of coherent federal policy on privatization of airports and other state and municipal enterprises that have previously received federal grants, the Order *directs* the FAA (among others) to approve requests by such governments to sell or lease such enterprises.

The only conditions attached to federal approval are: 1) that proceeds from the sale or lease be used in accordance with the provisions spelled out in the Order; and 2) that some sort of mechanism be in place (either market, contract, or regulatory) to ensure that the facility continues to be used for its original purpose and that user charges will continue to be such as to protect users from abuse.

Sale or lease proceeds must be used as follows. The first claim on the proceeds is for the government entity (in this case, the City) to recover its original investment in the facility, including any transaction costs; these funds may be put into the general fund. If there are funds remaining, the second claimant is the federal government, which is entitled to recoup a portion of previous federal grants to the facility (the full amount less accumulated depreciation based on IRS accelerated depreciation tables). If there are still funds remaining, the final portion of the proceeds must be used by the municipality only for investment in other infrastructure or for debt- or tax-reduction.

The second condition can be met, in part, by a deed restriction (in case of Sale) or a lease provision (in cases of Lease) limiting the property to airport uses. Great flexibility is permitted regarding the pricing of airport services. If the airport manifests monopoly characteristics, some form of regulatory mechanism would be one way of meeting this requirement. This could take the form of utility regulation by an outside body (e.g., the Civil Aeronautics Authority in Britain regulates airside charges at commercial airports), or controls on rate of return could be built into the franchise agreement (as was done in the Caltrans private toll road franchises, as provided for in AB 680). But since airports vary so greatly in their degree of competition, provision was also made for market mechanisms as ways of protecting users from pricing excesses.

In this regard, it should also be noted that a privately owned LAX would be subject to the full operation of federal and state antitrust laws, which prohibit monopolistic behavior and other anti-competitive activities. Municipal enterprises (such as LAX today) are exempt from these laws. Thus, the combined effects of antitrust laws and market mechanisms may well provide sufficient protection to airport users as to make more explicit forms of regulation unnecessary. (Further discussion of monopoly issues is presented in Section IV.)

B. Legal Assessment of AlternativesB. Legal Assessment of Alternatives

As part of the John F. Brown Company contract with the Airport Commission, the law firm Skadden, Arps, Slate, Meagher & Flom carried out a comprehensive legal analysis of the federal restrictions on the alternatives of sale, lease, and City (for-profit) ownership of LAX.[5] The findings in this legal memorandum are summarized in the paragraphs which follow.

1. City Operation For Profit

Skadden Arps first assessed the feasibility of the City being able to operate the airport at a profit for the general fund. To do so, it would have to either avoid the application of the law's prohibition on taking profits off the airport or else terminate the grant relationship. One way to avoid the revenue restriction might be to define certain types of revenues as non-airport revenues. But the only exclusions recognized in federal law and policy are for things like mineral rights or a water reservoir that clearly have nothing to do with aviation or airport users. Obvious revenue sources like parking and concessions would not be considered by the FAA.

The law appears to give the Secretary of Transportation the authority to release a grantee from specific grant "assurances" (provisions in the airport grant agreements, such as the revenue restriction), but the FAA may only modify such provisions to the extent that the change will "protect, advance, or benefit the public interest in civil aviation." Using airport revenues to help the City budget would not meet this test.

Land could theoretically be removed from the airport and used for non-airport commercial development, but this, too, would require FAA consent.

Legislation could be attempted, to grant LAX an exemption from the revenue restriction. But Congress has granted only a few very narrow exemptions to airport grant assurances. The most relevant of them was Hawaii's 1990 five-year permission to use revenue generated by *off-airport* duty-free shops for highway projects *which facilitate airport access*. This is a far cry from permission to use general airport revenues for general-fund purposes.

Finally, the City could seek FAA permission to terminate its participation in the grant program, but the legal memorandum concludes that "As a practical matter, however, absent a compelling reason, it is unlikely that the FAA would consent to a complete release of the assurances."

2. Sale or Lease of the Airport

The legal memorandum next addressed the question of sale or lease. It noted that the Executive Order *requires* federal agencies to approve requests to sell or lease airports, as long as the above-noted conditions are complied with. It also points out that repayment of federal grants might not be required in cases where the use of the property is not changed; the Executive Order's repayment provisions merely spell out how to calculate the amounts to be repaid in those cases where repayment is found to be legally required.

The memorandum affirms that a transfer of the airport to a new owner is permitted under existing federal law, and that private parties are eligible to be such owners and receive federal grants. It also concludes that the City would be entitled to use the proceeds from a sale for general purposes. This would be consistent with the way "airport revenues" are defined in the legislative history of the 1982 Act, with accounting definitions, and with the FAA's own handbook, which states that "Airport revenue does not include proceeds from the sale of real property owned by the sponsor."[6]

With respect to a long-term lease of the airport, the memorandum notes that the FAA Compliance Manual already provides for the lease of entire airports. Because of the Justice Department opinion regarding the proposed lease of Albany Airport, there is some question as to whether a municipality can fully recover and use lease payments (which DOJ assumed to be "airport revenue"). However, the Executive Order may supersede the 1991 DOJ opinion, since it provides that a municipality can recover proceeds from leasing its airport.

In concluding its memorandum, Skadden Arps states that "a sale or long-term lease of LAX to the private sector could be structured consistent with existing federal airport laws and regulations. In the wake of the President's Executive Order, there is even greater reason to believe that such transactions can be accomplished, should the City wish to pursue them."

C. City and State BarriersC. City and State Barriers

The City Attorney's Office delivered a report to the Mayor, City Council, and Airport Commission on June 23, 1992 assessing the current restrictions on transferring airport revenues to the City's general fund. This report identified several additional impediments to City operation of the airport for profit.

First, the City Charter would have to be amended, to remove the current section which requires that all airport revenues remain in the Airport Revenues Fund. This action was taken in the form of a charter amendment (Proposition K) approved by City voters in November 1992.

Second, either existing bondholders would have to consent to such revenue transfers (highly unlikely) or the approximately $500 million in outstanding bonds would have to be defeased.

In addition, state law imposes some important barriers. Under City ownership, the airport would remain a public entity. The airlines would be able to file suit against increased landing fees, contending that: 1) the increases are tantamount to special taxes ruled unlawful by Propositions 13 and 62 unless approved by a two-thirds vote of the electorate; 2) that the Aviation Department is a "special district" formed as a result of the Council's increased powers under Section 37.3 of the City Charter; hence any fee-setting becomes an unconstitutional levy of a special tax requiring two-thirds vote of the electorate; and 3) since the Assessor values possessory interest obligations by capitalizing all rents and fees, when landing fees are raised, property taxes will also go up, constituting double taxation. None of these problems would arise if the airport were leased or sold to private investors.

III. VALUE OF A PRIVATIZED LAXIII. VALUE OF A PRIVATIZED LAX

A. Private vs. Public OwnershipA. Private vs. Public Ownership

In its privatization study, Babcock & Brown constructed a financial model of future LAX revenues, expenses, and capital expenditures for the next 30 years. This model produced annual cash flows over the 30-year period. The present value of this 30-year stream of cash flows was then used to evaluate three hypothetical forms of restructuring: for-profit operation by the City, sale to a private owner/operator, or lease to a private operator.

It is a well-known adage in the consulting world that the outcome of a study is critically determined by the assumptions made by the analyst. That adage is confirmed by the B&B study. **The most critical assumption made by B&B is that future revenues and expenses would be identical, *regardless of the ownership structure of LAX***. In other words, if the City were released from current legal restrictions on earning a profit from LAX, B&B assumes its revenues would be the same as those earned by a private-sector owner or long-term lessee driven by commercial motivations. And likewise, the operating expenses were assumed to be the same, irrespective of ownership.

While these assumptions are not necessarily wrong, they fly in the face of extensive experience worldwide. Over the past decade, more than 75 countries have sold state-owned enterprises worth $265 billion—in part to raise revenue by converting a capital asset to a financial asset.[7] But they have also done so because they believed both that these enterprises would be more profitable in private hands than in public-sector hands, and that the clients/customers of those enterprises would be better served by the change of ownership.

The World Bank has recently released a large-scale study which confirmed that assumption.[8] World Bank researchers studied in detail 12 privatizations in Britain, Chile, Malaysia, and Mexico. The enterprises that were sold included airlines, electric utilities, a motor freight

company, a container port, and telephone companies. The researchers looked in detail at the performance of each privatized firm, and compared it with a careful estimate of how it would have performed had it remained in government ownership. In 11 of the 12 cases, there were major gains across the board, benefiting workers, customers, and shareholders (as well as the government selling the enterprise). The bottom-line message of the study is: ***ownership matters***.

While airport privatization is still relatively new (as noted in Section I), evidence has accumulated from five years of BAA performance and two years of Toronto's Terminal 3 that supports the argument that privatization makes a significant difference in airports as well. A 1990 analysis found that the corporatization and privatization of BAA produced significant gains in efficiency and productivity, as indicated by such measures as revenue generated per worker and passengers handled per worker.[9] Yet these productivity gains were *not* achieved by slashing the workforce. In fact, the number of BAA employees *increased* by nearly 1,000 between 1987 and 1991. In addition, the level of capital spending at BAA airports doubled following privatization, with new terminals being developed at Heathrow, Gatwick, and Stansted; on-airport hotels added at all three airports; and plans under way for a high-speed rail line from Heathrow to Central London, as a joint venture between BAA and British Rail.

In the five years since its ownership changed hands, the total value of BAA has increased significantly. The initial public offering in 1987 valued the company at $2.5 billion. By the beginning of 1992, the market value of BAA had grown to some $4 billion. Improved operations and efficiencies are evident in two primary areas. First, during the four years prior to privatization, the compound annual growth rate for BAA's revenues was approximately 9.4 percent. Since privatization, BAA's compound annual growth rate for its revenues was approximately 16.1 percent through 1991. Correspondingly, during the four years prior to privatization, the compound annual growth rate for BAA's profit before taxes was approximately 11.5 percent. Since privatization, BAA's compound annual growth rate for its profit before taxes was approximately 15.2 percent through 1991. In airports too, ***ownership matters***.

The structure of landing charges is significantly different at BAA's airports. Rather than charging a flat rate per pound of aircraft gross weight, as U.S. airports do, BAA charges rates based on the value of the service. Thus, landing charges at Heathrow and Gatwick tend to discourage small private planes from using these very busy airports, maximizing the number of passengers that can be handled. In addition, landing charges are higher at the peak hours of each day, and during the peak (summer) season of the year. Moreover, noisier aircraft pay a surcharge, and quieter aircraft receive a discount, to provide incentives for airlines to shift to quieter planes.

As a comparison to other major U.S. airports, LAX has the third lowest (out of 17) airline charges per enplaned passenger as presented on B&B's Airport Survey of Airline Charges (see see Appendix B, Page 3). LAX realized $2.04 airline charges per enplaned passenger in 1991 within a range extending between $1.69 and $9.13 for the major metropolitan airports in the U.S. Clearly, this is an area of potential improvement through privatization.

But the largest difference between U.S. airport practice and privatized airports is in the approach they take to concessions. Rather than viewing the sale of goods and services as an extra source of revenue, private owner/operators in both London and Toronto take an aggressively commercial approach. Airline passengers, after all, tend to be more affluent than the average citizen. They are virtually a captive audience for one to several hours, during which they may well be bored and frustrated. BAA and the Toronto Terminal 3 consortium therefore offer a vast array of goods and services for purchase—and at prices competitive with comparable name-brand outlets in the city. Both Heathrow and Toronto, for example, now include branches of the upscale London department store Harrod's as one of their terminal concessionaires.

Table 4 shows what a difference this kind of approach can make in terms of airport revenues.[10] It compares the net airport revenues per passenger from "inside" concessions: duty-free, food & beverage, gift & news, and telephone. (Excluded are such other categories as car rental and parking charges.) As can be seen, the net revenues per passenger at the privatized airports are from three to nearly six times as much as is generated at LAX. To be sure, the fraction of international travelers (who can take advantage of duty-free shopping) is higher at these airports than at LAX, but the general conclusion should be clear. A commercial approach, dedicating significantly greater space to stores and restaurants, can produce substantially greater revenue per passenger. Toronto's Terminal 3, for example, devotes nearly 8 percent of its terminal space to inside concessions, compared to just over 4 percent at LAX. BAA's London airports devote 15 percent of their space to concessions, and plan to increase this significantly over the next decade.

Table 4

INSIDE CONCESSION REVENUES PER PASSENGER (1991)

Airport	Gross Sales	Net Sales	Multiple of LAX
Los Angeles	$8.49	$1.40	1.0
Toronto T3	$10.40	$5.78	4.1
London Stansted*	N/A	$4.50	3.2
London Gatwick*	$22.68	$6.80	4.9
London Heathrow*	$22.86	$8.00	5.7

* London figures are for international passengers only

SOURCE: QDM Ltd. and Reason Associates, Inc., 1992

The ability to generate greater revenues from commercial sources extends beyond just concessions. A privately owned LAX would seek ways of maximizing its real-estate value, consistent with its primary function as an airport. This might include, for example, on-airport hotel and conference/meeting facilities, recreational facilities (e.g., fitness centers), and other commercial uses.

More robust revenues from commercial sources would avoid placing all the burden of profit-oriented management onto the airlines, who—after all is said and done—are the airport's primary customers. The relationship between an airport owner/operator and the airline tenants is much like that between a shopping mall owner and its tenants. Each needs the other, and they must operate as partners, not as adversaries. Between 1983 and 1990, BAA's revenue composition has changed dramatically. In 1983, it derived only 46 percent of its revenue from commercial sources, with the majority coming from airline charges. By 1990, expanding commercial revenues had increased to 58 percent of a larger total, with airline charges down to 42 percent.[11]

B. Modeling a Privatized LAXB. Modeling a Privatized LAX

The B&B study assumed only one change from LAX's historical trends of revenues and costs. B&B assumed that landing charges would be tripled, from $2 per passenger today to $6 per passenger in 1994 (and thereafter, increased annually to offset the effects of inflation). All other revenues, including concessions, were assumed to increase simply in line with historical trends based on the City's current not-for-profit management. And all operating expenses were assumed to continue to increase in accordance with historical trends. (see Appendix A, Schedule 1)

Based on worldwide experience with privatization of airports and other state-owned enterprises, we have revised the B&B cash-flow model to more accurately depict privately owned operations (see Appendix A, Schedule 2), changing the assumptions as follows:

1) Landing charges are assumed to be $4 per passenger rather than $6 as assumed by B&B. Tripling the existing (below-market) landing charges is not a realistic option for either the City or a private firm. (Consequently, we have revised B&B's airline-charge figures for the City ownership scenario as well).

2) Inside-concession revenues would be 2.5 times as great as under B&B's status-quo assumptions by the fifth year after privatization, and remain that much greater for the balance of the 30-year period.

3) Other operating revenues of $34 million per year (about 10 percent of total LAX revenues) are assumed to be generated from new services not currently offered at LAX but added by a private owner by the fifth year. (Thereafter, these revenues increase by five percent per year.)

4) Operating and maintenance expenses are assumed to be 15 percent lower than B&B's projection, reflecting increased efficiency under privatization. These expenses are assumed to include depreciation expense equal to the annual estimated routine capital expenditures. In addition, we have included depreciation expenses relating to major capital expenditures (see below).

5) We have assumed that a 40.1 percent blended corporate income tax rate would be

applied to the private owner's operating income. B&B did not include income taxes in its report; we believe this omission overstated the value of LAX to a private owner.

6) Major capital expenditures are incurred for a comparable set of projects to those listed in the B&B report, based on current LAX capital expansion plans; however, in line with private-sector efficiencies in procurement and construction, capital costs are assumed to be 10 percent lower. Furthermore, major capital expenditures are assumed to be paid as incurred, and not financed through tax-exempt bonds so as not to confuse the underlying economic value derived from the cash flows from operations with the method of financing those operations.

To analyze the lease alternative, we have assumed a lease scenario similar to that described in B&B's report. It is, in essence, a 30-year public-private partnership, akin to some of the lease/develop/operate (LDO) arrangements being used around the world for new or expanded airports and terminals. As in the other two scenarios, the financing of the enterprise is considered separate and apart from valuing LAX's operations.

Clearly, this is a case in which the City would exercise considerably greater control over ongoing airport operations than in the case of a sale. Consequently, the private operator would have less commercial freedom than under an ownership scenario—and this difference needs to be reflected in the revenue and expense assumptions. Hence, for this 30-year lease, we have modified the privatization scenario assumptions (Appendix A, Schedule 3), as follows:

1) Instead of 15 percent savings on operating & maintenance expenses, savings of 7.5 percent are assumed for this case.

2) The assumed new sources of commercial revenue that generate $34 million per year in the sale case are omitted from this scenario.

3) However, we retain the same aggressive expansion of concession operations and revenues as in the sale scenario, since strong incentives for such expansion would be present even within the constraints of this type of lease.

4) Capital expenditures are assumed to be the same as in the City ownership scenario, because of the City retaining ownership and a greater interest in the details of future operations.

5) The payment to the lessee is assumed to be five percent of operating cash flow, as in B&B's lease scenario; the balance of the cash flow goes to the City.

C. How to Compare the AlternativesC. How to Compare the Alternatives

As Michael Brown of John F. Brown Company told the City Council's commerce, Energy & Natural Resources Committee on July 14, 1992, the key issue is determining how to maximize the "shareholder" value of LAX to its present owners—the citizens/taxpayers of Los Angeles. Which of the three alternatives—sale, lease, or City operation—would, in fact, maximize that value?

The B&B report uses a standard technique of computing and comparing the net present value (NPV) of the financial flows from the three alternatives in order to arrive at an answer. While the technique is the correct one, once again, the key factor is the assumptions used.

1. Separation of Operations from Financing

Current valuation theory mandates that the operating aspects of an enterprise be analyzed separate and apart from financing the enterprise. B&B's analysis does not make this distinction and thereby does not provide an accurate estimate of value for the operations of LAX. We have removed all financing assumptions from our analysis as they should have no impact on the underlying economic value of LAX's operations, and are merely a method for how an operation may be financed—without any impact on value.

2. Choice of Discount Rate

A critical choice is that of the discount rate. In financial theory, the discount rate is an interest rate used to adjust the value of future flows of funds to their value today. The higher the discount rate, the lower the present value. Likewise, the lower the discount rate, the higher the value. Thus, the choice of discount rate can have a significant impact on the relative ranking of the value of the alternatives.

In weighing the value of these alternatives, the City should use a discount rate that accurately reflects the opportunity cost of receiving some payments in the future rather than today, in conjunction with the relative risk of receiving these payments, i.e. the relative risk of the enterprise.

The B&B study used a discount rate of 6.5 percent, which was the approximate then-current yield on the City's 20-year general obligation bonds, a relatively low risk investment. Most financial theorists would consider that an incorrect choice because it under-estimates the relative return that the City should receive based on the risk of the project. A more appropriate reflection of the City's opportunity cost may be the income that it actually earns on its investments which reflect a higher degree of risk than the general obligation bonds. The June 1992 final report by John F. Brown Company presents, in Table II.1, annual yield figures on City investments, from 1985 through 1992.[12] The average value over this eight-year period is 8.39 percent. We believe that this is a more appropriate discount rate.

Some analysts would consider even 8.39 percent to be too low. A recent report on infrastructure

from the Transportation Research Board of the National Research Council[13] points out that the federal Office of Management & Budget recommends using a discount rate of 10 percent for public-sector projects, and notes that the TRB's survey of current practice found that "state and local analysts tend to use this rate as well." As an alternative, the report suggests using the rate of interest on a state's pooled money investment fund—which would be comparable to the City's 8.39 percent earnings rate.

Finally, one may look at the implied discount rate on the earnings of BAA Airports. At the time BAA went public in 1987, its price/earnings multiple was 15.3, representing an implied discount rate of approximately 6.5 percent. However, despite BAA's improved financial performance since privatizing, its price/earnings multiple as of 1991 was 11.5, representing an 8.7 percent discount rate. In essence, the market appears to have adjusted upward its required rate of return based on the relative risk for an investment in BAA, despite its improved operating performance.

3. Inclusion of Other Revenue Flows

A valid assessment of the relative value of LAX under the various alternatives must include the present value of *all* revenue flows from the alternatives. The discussion above has explained why a privatized LAX would generate higher concession revenues than a City-owned LAX. Since these higher revenues represent taxable sales, the difference between sales tax revenue under City ownership and sales tax revenue under private ownership must also be quantified and reduced to present value. Likewise, under the sale alternative, the privately owned LAX would pay property taxes, and the present value of that portion of incremental property taxes realized by the City (about 40 percent) over the 30-year period must also be included to determine the value of this alternative to the City.

D. Maximizing "Shareholder" Value: City Ownership, Sale/Private Ownership, or Long-Term Lease?D. Maximizing Shareholder Value: City Ownership, Sale/Private Ownership, or Long-Term Lease?

Using the principles and assumptions laid out in the preceding sections, it is now possible to make a full comparison of the financial consequences of the restructuring alternatives for LAX. As noted previously, the financing of the enterprise is considered separate and apart from valuing LAX's operations.

Based on the assumptions set forth above, the spreadsheets contained in Appendix A were generated for the three cases of City ownership,[14] sale/private ownership, and 30-year lease. Using the principles discussed in the preceding section for comparing present values of all relevant revenue streams, the "shareholder" value (to the City) of the three options are compared in Table 5. In all three cases, we modified B&B's assumption that $300 million of current cash reserves would be available to apply to outstanding debt and transaction costs. To be more conservative, for all three scenarios we assumed that only $150 million of cash reserves would be available for this purpose. The net effect in each case is to reduce the present value of either

the future stream of payments or of the up-front purchase price by a net of $462 million. (Note: $12 million of the current debt represents capital expenditure obligations which are assumed to be retired.)

Table 5

COMPARISON OF PRIVATIZATION OPTIONS

	City Ownership[1]	Sale/Private Ownership	30 Year Lease[2]
Present Value of Cash Flows (@ 8.39%)	$2,027,706	$2,280,907	$3,232,886
Present Value of Residual Value (@8.39%)	$567,957	$645,842	$913,919
- Present Value of Buyer's Property Taxes (@8.39%)	N/A	(458,020)	N/A
+ Cash Reserves	$150,000	$150,000	$150,000
- Outstanding Debt	(512,000)	(512,000)	(512,000)
- Transaction Costs/etc.	(100,000)	(100,000)	(100,000)
Sub-Total	N/A	$2,006,729	$3,684,806
+ PV of Incremental Sales Tax (@ 8.39%)	N/A	$12,307	$12,307
+ PV of Property Tax (City Realizes 40% of Property Taxes)	N/A	$183,208	N/A
Total (Value to City)	$2,133,633	$2,202,244	$3,697,112

[1] Revised Babcock & Brown [2] Public/Private Partnership

SOURCE: Reason Foundation

For the City ownership scenario, that leaves a final net present value of $2.13 billion. This represents the airport's financial value to its citizen-owners under continued City operation—*assuming* that the federal law that prevents for-profit City operation could be repealed. In other words, this is the *best-case* version of City operation. Without that major legal change at the federal level, LAX would be forced to continue to operate on a non-profit basis as far as the City treasury is concerned (and the net present value of cash flows to the City would be zero).

By comparison, the net present financial value to the City of the sale/private ownership option is $2.2 billion. This number is the sum of the $2 billion value of the purchase price (adjusted for the present value of property tax expense and net transaction costs of $462 million) *plus* the net present value of the two associated incremental revenue streams—from increased sales tax and property tax revenue to the City. The primary difference between this scenario and that of City ownership is caused by income taxes (40.1 percent of operating profit) which must be paid by a private owner. In essence, the private owner only realizes after-tax cash flows whereas the City realizes pre-tax cash flows.

The 30-year lease has a net present value to the City of $3.7 billion. This is significantly more than the value of City ownership or sale/private ownership scenarios. In effect, it represents the best of both worlds, permitting the City to receive a significant return on its investment in LAX, but without having to give up the degree of control that it would in the event of an outright sale.

E. Other Options in PrivatizationE. Other Options in Privatization

1. Grant Payback

As noted previously, a private owner of LAX would be eligible to assume the airport's current FAA grant assurances and to receive discretionary and noise-related grant funds. But in exchange for doing so, the airport company would be bound by the economic regulatory provisions entailed by the grant agreements. A private firm might wish to free itself from these controls by terminating the grant agreements and repaying the federal grants, as provided for in the Executive Order.

Babcock & Brown has estimated the magnitude of outstanding LAX grants, less accumulated depreciation on the assets acquired with the grant funds, at some $200 million. This sum probably overstates the amount which would have to be repaid, for two reasons. First, except for grants used for land acquisition, FAA airport grant agreements have a 20-year life; hence, only those grants made within the previous 20 years would be subject to repayment. Second, the Department of Airports uses ordinary depreciation, while the Executive Order permits the use of accelerated depreciation. This would reduce the net amount left to be repaid.

Even the full $200-million amounts to under 10 percent of the estimated market value of LAX. If the airport company opted to repay the grants, it would have to provide for this expense in its financial plans. This additional expense has not been included in the financial projections in this report, which have assumed that the grant agreements remain in force and that, therefore, no repayment is necessary.

If the private airport company did decide to terminate the grant agreements, it would gain increased pricing freedom (subject to any City-imposed franchise regulation). For example, it would be able to charge per-passenger fees without having to request the FAA's permission, and without having to dedicate the revenues from those fees solely to FAA-approved uses. It would also find it easier to charge peak and off-peak landing fees and noise-related landing charges—pricing structures which the FAA has not encouraged.

2. Selling Part-Ownership

An option not included in the restructuring alternatives modeled in this report is for the City to sell a partial interest in LAX rather than 100 percent ownership. As noted in Section I, several governments overseas are doing this, generally as a means of raising capital for airport

expansion. It would appear to be consistent with the Executive Order for a city or state to sell a majority interest (51 percent or more) to investors while retaining a minority share of ownership and control.

There are at least two potential advantages of this course of action. Many of the concerns about protecting the public interest in the event of privatization (discussed below in Section IV) could be addressed more directly if the City were represented on the airport's board as part-owner. Those citizens who fear the loss of public control may feel more comfortable with this sort of joint ownership than with full privatization.

Second, although owning 49 percent would nominally give the City no more than 49 percent of the financial benefits of full privatization, based on the financial projections discussed previously, retaining part ownership in the airport would offer the City the possibility of benefiting from the airport's future appreciation in value. As noted previously, in its first five years in the private sector, BAA increased in market value from $2.5 to $4 billion. The City's part-interest in a privatized LAX might have similar upward potential.

The California constitution appears to forbid cities from purchasing shares in private corporations. Legal research would be needed to ascertain whether a city may, under California law, sell a part-interest in a municipal enterprise to private investors.

IV. PROTECTING THE PUBLIC INTERESTIV.PROTECTING THE PUBLIC INTEREST

While this report has made the case that the sale or lease of LAX is more feasible to accomplish and more financially advantageous to the city, many citizens and public officials have expressed concern over whether the public interest could be adequately protected with the airport in private hands. This section addresses those very critical concerns.

It may help to keep in mind that although investor ownership of airports is unfamiliar to Americans, we take for granted investor ownership and operation of other vital public utilities. For example, numerous residents of Los Angeles County receive their electricity from Southern California Edison and nearly all get their natural gas from Southern California Gas Co. The citizens of San Jose get their water from an investor-owned water company. And we all obtain our telecommunications services from one or more investor-owned phone companies.

In each of these cases, as in the cases of airport privatization described in Section I of this report, there is some degree of public oversight of the company's operation, in order to protect the public interest. This section discusses the possible types of public oversight that could be used for a privately leased or owned LAX and the principal public-interest issues that must be addressed.

A. Public Interest MechanismsA. Public Interest Mechanisms

1. Sale of LAX

At least four possible mechanisms could be used to protect the public interest in the event that LAX were sold to investors: deed restrictions, a franchise agreement, economic regulation, and "golden shares." To some extent these four mechanisms are alternatives, i.e., a particular issue might be handled either via a provision in the franchise agreement or via a deed restriction. An oversight regime for a privately owned LAX would have to be designed drawing selectively on these mechanisms.

- **Deed Restrictions.** The deed of sale is a legal document which can include conditions limiting (either forever or for a specified number of years) the uses to which the property may be put. In the case of LAX, both the Executive Order and sound public policy would suggest that a deed restriction be included that would require LAX to continue to be used for air transportation purposes. Other binding, long-term provisions might also be included in the deed of sale.

- **Franchise Agreement.** A powerful way of protecting the public interest would be to sell LAX subject to a perpetual franchise agreement, administered on the City's behalf by the Airport Commission. As described by Price Waterhouse analysts William Payson and Steve Steckler,[15] under such an arrangement the private owner would hold title to the airport in perpetuity, subject to compliance with the terms of the franchise. The Commission would be able to revoke the franchise if the airport owner violated its terms. The franchise agreement offers one way of dealing with potential monopoly problems, since it may incorporate limits on pricing and/or on overall rate of return, as discussed later on in this section.

- **Economic Regulation.** If monopoly problems are not addressed within the franchise agreement, the City could sell LAX subject to economic regulation by an outside agency. Potential candidates for this role include the California Public Utilities Commission (which regulates several types of utilities and transportation industries) and the Federal Aviation Administration (which has the authority to regulate airport rates and charges via provisions in the grant assurances). Another possibility would be the Airport Commission, although this might represent a conflict if the City continued to own LAX's competitor, Ontario Airport. As discussed below, the degree and type of economic regulation can significantly affect potential buyers' valuation of an enterprise, and hence must be approached with great care.

- **Golden Share.** In its extensive privatization program over the past decade, the British government has frequently retained a single special-purpose share of

ownership in large enterprises. The share carries with it special voting rights designed to protect certain specific aspects of the public interest. In some cases, these shares exist only during a transition period (typically five years), generally to permit management time to transform the company without fear of a takeover. This type of golden share usually permits the government shareholder to veto the acquisition of more than 15 percent of the voting shares by any one person.

"Timeless" golden shares have been used in less than a dozen strategic companies, such as British Telecom, British Gas, British Aerospace, and BAA. In the case of BAA, its golden share is held by the Secretary of State for Transport. It does not confer general voting rights, but it does require the golden shareholder's consent for: 1) the disposal of the whole or a substantial part of Heathrow, Gatwick, or Stansted Airports; 2) any change to the current provision in BAA's Articles limiting a single shareholder to 15 percent of the shares; and 3) the winding up or dissolution of the company.

A variety of conditions could be imposed on a privatized LAX via a golden share, with a specific City official (e.g., the mayor or the chairman of the Airport Commission) designated to hold the share.

2. Long-Term Lease of LAX

The lease alternative is more straightforward than a sale, from the standpoint of protecting the public interest. A long-term lease agreement, like a franchise agreement, is the standard legal document in which all such terms and provisions are incorporated. The City retains the underlying ownership, and is therefore free to set forth any conditions it wishes in the lease agreement. Needless to say, however, the more those conditions restrict the lessee's commercial and business freedom, the lower the value of the leasehold will be to potential lessees. The Airport Commission's role would be to administer the lease on an ongoing basis, reflecting the City's interest as the ultimate owner of the property.

Although economic regulation could readily be handled via the lease agreement, outside economic regulation (as in the case of sale of the airport) would also be an option.

B. Public Interest IssuesB. Public Interest Issues

1. Public Participation

One of the most frequent objections to airport privatization is the perception of loss of control and participation by the public. This concern may be addressed by involving citizens in the decision to privatize LAX (e.g., via public hearings and a vote to amend the city charter) as well as by providing a mechanism for citizen input on future decisions by the airport. As noted in a

recent report on airport privatization from the American Association of Airport Executives,[16] such participation could be fostered by the formation of an ongoing citizens advisory board, naming prominent citizens to the airport company's board of directors, and holding regular meetings with civic and governmental organizations and committees. These mechanisms could be spelled out in the franchise or lease agreement. In the Sale option, one factor the City should consider, in its role as the seller, is whether the potential buyer plans a public stock offering, which would permit the citizens of Los Angeles to become part-owners of the new airport company. We also recommend that the Airport Commission remain in existence, to administer the lease or franchise agreement on behalf of the City.

2. Employee Protection

Public employees have often opposed "privatization," assuming it to be synonymous with layoffs. But the type of privatization which labor unions have been fighting is contracting-out of public services. The sale or lease of a profitable government enterprise is a different matter, particularly if its business prospects indicate steady growth. In Britain, BAA added nearly 1,000 employees in the four years following privatization, thanks to increased growth in airport activity. Unions working at Malaysia's recently privatized port—having obtained higher wages via the change—are recommending that other unions support port privatization.[17] LAX has excellent prospects for steady growth, which is part of what makes it an attractive commercial proposition to prospective buyers.

A lease or sale can be structured to include employee protection provisions—for example, a clause restricting layoffs of current employees. But it is important that the buyer or lessee be able to conduct ongoing employee relations—hiring and firing, promotion, compensation, etc.—following normal business (as opposed to civil-service) practices. Mandating civil-service-like working conditions would reduce the airport's financial attractiveness and would limit the opportunity for the kinds of productivity gains that are found in privatizations worldwide.

An important factor in employee motivation is the availability of shares of stock for airport workers and managers. Both developed countries (Britain, France) and developing countries (Argentina, Chile, Mexico) routinely specify that a portion of the shares in a privatized enterprise be reserved for employees. Frequently, those shares are offered at a significant discount. Share-ownership gives workers and managers a tangible stake in the success of the enterprise, allowing them to benefit personally from improvements in productivity. Some 90 percent of BAA employees own stock in the company, and 45 percent are enrolled in a payroll-savings plan to purchase more. If at all possible, this international precedent should be followed in the sale or lease of LAX.

3. Safety

Some have raised the question of whether privatized airports would be as safe as publicly owned airports; it is charged that private owners would focus only on the bottom line, to the detriment

of airport safety. In this regard, it is important to remember that the FAA would remain fully "in the loop" as the safety regulator of LAX, just as it is today. Payson and Steckler point out further that the incentives facing a private airport owner/operator would, if anything, promote greater concern with safety than exists today, for several reasons: 1) compared to a municipal entity, a private airport firm would have less protection against full legal liability, which would provide strong incentives to go the extra mile on safety (especially in litigation-prone California); 2) any perception of safety problems would drive away business to alternative airports, and 3) the franchise or lease agreement could include specific provisions requiring high-level safety standards which, if breached, would be grounds for penalties or even termination of the agreement.

While the most complete example of airport privatization—BAA—is only in its sixth year, there has been no evidence that operations at the seven BAA airports are any less safe than they were prior to privatization, or than government-run airports of comparable size and activity levels.

4. Noise

As is the case with safety, the legal rules and regulations concerning airport noise would apply equally strongly if LAX were leased or sold. And likewise, the private firm would have strong incentives to be responsive to community concerns over airport noise. A private firm will probably be perceived by potential noise litigants as having deeper pockets than a municipal government. This will give the company strong incentives to minimize the risk of such litigation via strong noise-control efforts. In addition, a private firm might emulate BAA in charging higher landing fees to noisier (Stage 2) aircraft and lower fees to quieter (Stage 3) planes.

The record to date of both privately owned airports such as those in Britain and of privately managed airports such as Burbank is one of steady year-by-year reductions in community noise exposure.[18]

5. Liability and Insurance

Some have questioned whether a private company could afford to insure against the large liability exposure entailed in owning and operating a major airport. The magnitude of this exposure is comparable to that against which major airlines must insure (e.g., the collision of two fully loaded 747s). An extensive international re-insurance industry has developed to deal with large risks of this type. The basic idea is that the primary insurance carrier for a particular type of risk re-insures by breaking up the exposure into smaller pieces (typically 5%) which are borne by other insurance companies. Thus, in the event of a major accident, no single company bears more than a small portion of the cost.

To cite once again the largest example of airport privatization to date, BAA has had no problem insuring against the liabilities involved in operating two of the world's largest and busiest airports, Heathrow and Gatwick. The franchise or lease agreement should, of course, spell out

required levels of insurance coverage which any buyer or lessee must meet.

6. Bankruptcy

Despite the apparently robust economic future of LAX, what would happen if the airport firm encountered financial difficulties and had to file for bankruptcy protection? It is important to remember that a Chapter 11 filing represents a reorganization of the company, not its dissolution. Under Chapter 11, the firm continues to operate, providing the same basic services as before the filing. In the more severe instance when the company must cease operations (Chapter 7), the physical facilities do not disappear; they remain in place, available for operation by new owners and managers. There should be no shortage of bidders to take over the airport under such circumstances.

While the likelihood of a private LAX operator going bankrupt appears very remote, it must still be provided for in the legal provisions designed to protect the public interest. The lease or franchise agreement should include default provisions entitling the City to terminate the lease for various types of failure to perform. One such provision can be the filing of a bankruptcy action (as in the lease agreement for the privatized Terminal 3 in Toronto). However, under U.S. bankruptcy law, such a provision would not be enforceable. The lessee can assign the lease to a new lessee, notwithstanding the objection of the lessor; however, the new lessee must demonstrate to the bankruptcy court its ability to assume the obligations called for by the lease, thereby protecting the City. In the event that a bankrupt firm ceased operation, the City would be able to hire an airport management firm to take over LAX operations on an interim basis, while bids were being sought for a new lessee or purchaser.

7. Preventing Monopoly Pricing

There are two critical questions to be answered concerning the potential of monopoly pricing at an airport. First, which aspects of the airport's services actually possess monopoly characteristics? Second, for those aspects which are monopolistic, what is the most effective way to regulate them?

On the airside, LAX faces competition from four other local airports for domestic passenger service: Burbank, John Wayne, Long Beach, and Ontario. And as a domestic airport hub, LAX competes with airports throughout the West. But for international service, LAX has a de-facto monopoly for travelers based in the greater Los Angeles area. (International passengers using LAX merely as a west-coast transfer point have San Francisco, Portland, and Seattle as alternatives.) Ontario provides significant competition for cargo airlines, and the former Norton Air Force Base is expected to do likewise in the near future. For non-airline users—i.e., general aviation (GA)—LAX faces competition from numerous local GA airports, the largest of which is Van Nuys. Thus, the only airside monopoly problem at LAX is its monopoly on providing international flights for origin and destination (O&D) passengers.

Turning to the landside, when it comes to concessions (shops and food service, rental cars, etc.), passengers who originate or terminate their trips at LAX need not use any of these services, since comparable services are readily available from nearby off-airport businesses. Transfer passengers have no effective choice about concessions while at LAX, but because those passengers could have used alternative airports, they are not technically "captive" to LAX concessionaires. Thus, there is little or no monopoly problem with LAX's landside services.

The British government reached a similar conclusion regarding the large British airports, both private (Heathrow and Gatwick) and public (Manchester). Economic regulation applies to the airside, because of significant monopoly aspects, but not to landside services. Interestingly, in the absence of landside regulation, BAA has made a point of requiring its concessionaires to agree to charge the same prices for goods and services as can be found in London, and this point is widely advertised. A similar provision has become part of BAA's recent contract to manage all concessions at the new Pittsburgh airport.

What mechanisms exist to protect international flights from monopoly pricing? First of all, international air service is governed by bilateral treaties negotiated between governments. Those governments generally act to protect airlines from discriminatory pricing.

Second, if the privatized LAX elects to continue to be eligible for and to receive federal airport grants, it will be required to continue to comply with the FAA's grant assurances, one of which prohibits discriminatory pricing. Charging higher rates to international flights per se—apart from any relationship to higher economic costs to the airport of serving them—would presumably violate this grant assurance.

If the privatized airport opts for the greater flexibility that would be permitted by foregoing federal grants and avoiding being subject to FAA grant agreements, it would be still subject to federal and state antitrust laws (unlike today's municipally owned LAX, which is exempt from those laws). Price discrimination and other anti-competitive practices (such as permitting existing airline tenants to veto airport expansion that would permit competing airlines to serve the airport) are prohibited by the antitrust laws. Private ownership would thereby offer consumers stronger protection than they receive under municipal ownership.

Given the new protections offered by the antitrust laws and a franchise or lease agreement, possibly supplemented by continued FAA grant assurances, it is not clear that any more-direct economic regulation is needed—especially given the degree of competition faced by LAX in most of its markets. But if it is deemed necessary to impose an additional layer of regulation, a choice must be made between limits on pricing and limits on rate of return. And a decision must be reached on which agency is most appropriate as the outside regulator.

Traditional U.S. public utility regulation (which controls both prices and rate of return on investment) assumes that the regulated enterprise is a full-fledged "natural monopoly," with no competition and economies of scale (i.e., the larger its operations, the lower its unit costs). These

conditions do not fit LAX very well, given that: 1) it faces competition in most of its markets; and 2) like other large urban airports, it very probably does not possess economies of scale.[19] Hence, traditional PUC-type regulation would not be suitable for a privatized LAX. And economists now recognize that traditional PUC regulation discourages innovation and is quite costly and time-consuming.[20]

Two newer forms of economic regulation are being applied to infrastructure enterprises today. The British have pioneered a form of price-cap regulation known as RPI minus X, where RPI is the retail price index and X is a factor specified by the regulatory body. For a five-year period, prices or revenues may be increased each year by no more than RPI minus X. The basic idea is to provide an incentive for efficiency by permitting price increases lower than the rate of inflation. (This is the type of regulation applied to the airside at BAA's London airports, to other British utility enterprises, and to AT&T and some other telephone companies in the United States.)

The other new form of regulation is a negotiated ceiling on rate of return that is incorporated into the franchise or lease agreement. Both Arizona and California are using this type of regulation in their private toll road programs (which involve long-term leases rather than private ownership). The idea here is to leave the company free to use innovative pricing to limit congestion, but to prevent above-market rates of return on investment which might result from such pricing. In both states, the regulatory body is the state transportation department, not the traditional public utilities commission.

Both newer forms of regulation have their disadvantages. Controls on prices can prevent the flexible use of pricing to optimize use of the airport's limited capacity; they can also lead to revenue shortfalls in times of lower demand, putting bond or lease payments at risk. In addition, costs can change far more rapidly than regulators can respond, again threatening profitability and bond or lease payments. On the other hand, ceilings on investors' returns can limit the capital available for airport projects, since capital can flow to other, more profitable, investments whose rates of return are not regulated.

As a general rule, the greater the degree of economic regulation imposed, the less attractive LAX will be to investors. Hence, the greater the degree of regulation, the lower the financial benefits of Sale or Lease to the City. Careful tradeoffs will have to be made between the City's financial objectives and its desire to guard against monopoly pricing. If FAA grant assurances and/or antitrust protections are deemed sufficient, the City will be able to realize the maximum financial value from LAX.

8. Safeguarding the Proceeds

A final public-interest issue concerns the use of the proceeds from a sale or lease of LAX. As noted in Section III, the total net present value of the sale and lease options are $2.2 billion and $3.7 billion, respectively. These are major sums of money, whose use must be protected from ill-

considered and wasteful spending. One way to do this would be to enact a charter amendment specifying the uses to which these funds could be put.

In the event of a Sale, the basic idea would be to treat the proceeds like an endowment, dedicated to a specific purpose or set of purposes. The principal—which we have estimated as a net value of $2 billion—would remain as an asset on the City's books. It would be invested and only the earnings would be available each year for the designated spending purposes. If these funds earned the City's current average return of 8.39 percent, the annual earnings would be nearly $168 million. Those earnings would be deposited in a special-purpose fund, to be spent only for the allowed uses.

If the lease were chosen instead, the stream of cash available to the City would increase year by year, beginning at $159 million in 1994 and increasing to approximately $860 million in 2023 (see Appendix A, Schedule 3). The City would dedicate these lease payments to its special-purpose fund, to be spent only for the allowed uses.

What might those uses be? Since a portion of the sale or lease proceeds would be covered by the use-restrictions set forth in the Executive Order, that portion of the funds could only be used for other municipal infrastructure, to repay debt, or to reduce taxes. The other portion, representing the return of the City's original investment in LAX, could legally be used for any purpose, as far as the federal government is concerned. In drafting the charter amendment to set up the special-purpose fund, City officials would have to consider both infrastructure and service-delivery needs. Increased police protection, new storefront police stations, bridge rehabilitation to meet earthquake standards, new and refurbished public housing, and many other public needs would all be candidates.

It is beyond the scope of this report to attempt to recommend the best use of the City's windfall from LAX. But since the City has many unmet needs and possesses other potentially saleable assets (e.g., other airports, the convention center, the Department of Water & Power, and municipal golf courses), it might be wise to draft the charter amendment to deal with the proceeds from such sales, in general, rather than limiting its scope merely to the proceeds from LAX. Privatizing municipal enterprises and wisely investing the proceeds is not “selling the family silver.” It is merely changing the form of an asset—from physical capital to financial capital. The asset would still remain dedicated to meeting the public-sector needs of the citizens of Los Angeles.

ABOUT THE AUTHORSABOUT THE AUTHORS

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APPENDIX AAPPENDIX A

Financial Spreadsheets

for

LAX Restructuring Alternatives