Airport Policy in the United States: The Need for Accountability, Planning, and Leadership

LYN LOYD CRESWELL*

TABLE OF CONTENTS

* Lyn Loyd Creswell was born December 21, 1948. He has been awarded the following degrees: Bachelor of Arts, Brigham Young University (1973); Juris Doctorate, University of Utah (1979); and Master of Laws, The George Washington University (1986) Doctor of Juridical Science (SJD) (May 1990). Mr. Creswell is certified by the Federal Aviation Administration as a private pilot (1972), and as an air traffic controller (1974). Mr. Creswell is also a member of the Utah State Bar. Since 1973 he has served as an officer in the United States Marine Corps with assignments as: air traffic control officer (Southern California); Claims Officer (Australia); land use/local government counsel (Southern California); land use/legislation officer (Washington, D.C.). During 1988 Mr. Creswell served as the Marine Corps' representative on the Defense Secretary's Commission on Base Realignment and Closure (Carlucci Commission). In 1989 he was selected as a Congressional Fellow by the American Political Science Association. Mr. Creswell is now a Legislative Assistant to the Honorable Ron Packard, Member of the U.S. House of Representatives.

I. INTRODUCTION

Nearly every community in the United States is now within reasonable proximity to an airport which provides commercial air transportation services. Since the 1950s the Nation has grown to rely more and more on this system of airports to conduct important business, social, governmental, and educational activities. And, vital to many regions and the Nation is the contribution airports and aviation activity make to the economy.

A recent study suggested the economic activity associated with civil aviation in the United States exceeds $500 billion annually.

But, this national system of interconnecting, economically-beneficial airports is controlled almost exclusively by very independent units of local government. While many of these governments receive adequate to very handsome rewards for their participation in the national aviation system, they encounter intergovernmental, land use, and budgetary forces which detract from a vigorous promotion of airport services. For almost three decades now this locally-controlled, national system has been criticized by air travelers, business leaders, airlines, airport neighbors, and elected officials, as inefficient and unfair.

The purpose of this research was to review this locally-owned, national system of commercial airports and determine:

- whether there was public and private sector *accountability* commensurate with the importance of airports to the Nation; and
- if there was an adequate level of *planning*, meaning the development of goals, policies, and procedures, to meet the long term requirements of the Nation's air transport segment.

Such a review is timely since the Bush Administration has now adopted a "national transportation policy," including the announced intention to improve airport capacity within the Nation. Many were surprised, however, that the Administration's policy seemed to back even further away from a strong federal role in solving the Nation's complex transportation infrastructure problems. Unfortunately, the Administration's position is fairly consistent with previous federal neglect of the airport system in the United States. Because of past and present neglect, the federal government has come under increasing pressure from the aviation industry to accept more responsibility and ensure better planning for the Nation's airports. Others have criticized commercial air carriers for failing to become more involved in solving the many airport problems. The conflicts and differences of opinion over airport policy in the United States seem to have grown more pronounced.

Deregulation and Its Aftermath

In 1978 the United States Congress passed legislation leading to the demise of the Civil Aeronautics Board, and eliminating federal regulatory controls over air carrier routes and air fares. During the next decade the competitive practices of the deregulated aviation industry, along with a strong national economy, combined to double commercial air passenger activity. The result was congestion and delays, especially during peak-hour travel times, at many limited-capacity, urban airports.

Of concern to many during this period has been the absence of increased cooperation among the airport operators, the airlines, the local

governments, and the federal government, each having control over different solutions to the capacity problem. Such cooperation, of course, is necessary not only to keep traffic flowing at particular airports, but to assure that costly congestion and delay at one airport does not have a ripple effect at other airports within the national system. Some argue this latter fact calls for special federal intervention.

The Federal Aviation Administration, which was left with the primary federal responsibility for air commerce after deregulation, responded to this system capacity crisis by targeting improvements in its air traffic control operation. But the long range solutions to national system capacity problems require additional actions, such as real estate acquisition, land use and environmental planning, economic incentives, and regulatory controls. The Federal Aviation Administration, however, has played a very minor role in these and other non-air traffic control alternatives.

THE AIRPORT PROPRIETOR'S WEB

PRESSURE FROM NOISE IMPACTED HOMEOWNERS

The surge in air traffic became troublesome for airport proprietors who have found themselves standing alone to answer homeowners worried about increases in noise levels and reduced property values. Some airports have responded by adopting "curfews" or other restrictions on airport use to appease their neighbors. But, such restrictions can limit an airport's capacity, compounding the problem of satisfying the growing demands within the national system. The air carriers, in particular, have complained about airport use restrictions, and called on the federal government to curb them.

AIRPORTS AS SOLELY LIABLE FOR NOISE INJURIES SUFFERED BY NEIGHBORS

One reason behind the airports' ability to unilaterally restrict the use of airport facilities arises from the legal remedy available to noise-impacted landowners. That remedy makes airport proprietors solely liable for any injury caused by aircraft noise. But, this rule of law is inconsistent with the realities of diverse public and private sector decision making which combine to impact airport neighbors. Nevertheless, these other decision makers, including air carriers, local governments, and the federal government, have been content to avoid liability by: acknowledging the preeminent role of airport proprietors; and avoiding actions which might be interpreted as a sharing or preempting of the airports' authority.

VERY DIVERSE PUBLIC AND PRIVATE SECTOR OBJECTIVES CAUSE PROBLEMS FOR LONG RANGE AIRPORT DECISION MAKING

Notwithstanding this reluctance to become legally accountable for airport noise, these other actors have competing interests causing them to complain about or subtly undercut some airport proprietor decisions. Air carriers, for example, are concerned about corporate profits and have used their economic power to influence airport facility construction and noise-related use restriction actions which are inconsistent with company planning. Also, local governments which benefit from the tax revenues of new development often ignore airport-requested prohibitions against residential construction in high noise exposure zones. Or, local governments may operate their own airports and use political leverage to oppose the expansion of another government's airport which might compete for revenues.

SPLIT OR NON-EXISTENT POLITICAL ACCOUNTABILITY FOR AIRPORT-RELATED DECISIONS

Of course, part of the problem is that political responsibility for decisions affecting airports is fragmented. While the states or the federal government could step in and orchestrate cooperation and compromise, they have been reluctant to do so. Among the reasons for such hesitation are: the intent to avoid legal liability; concepts of federalism or state prerogatives; and the perception that airport matters are "land use" decisions which historically are locally-made.

AIRPORT PROPRIETORS AS POOR LONG RANGE PLANNERS AND RESOLVERS OF "LAND USE" CONFLICTS

But if airports are both legally and politically accountable for important long range airport decisions, and for resolving local "land use" conflicts, studies indicate many are poor planners and community conflict negotiators. Ideally airports which are part of the national air transportation system should dedicate significant funding and personnel resources to the following functions:

- understanding and tracking community land use and transportation planning and decisions;
- credible data collection and forecasting of airport activity in support of airport-related construction and noise compatibility plans;
- effective communication with, and education of, the public and elected officials at all levels of government; and
- establishing close working relationship between airport and community fiscal, legal, and real estate professionals.

Of course, any failure of airports to commit local resources to such functions is partly understandable. If budgets are constrained airport decision

makers may prioritize funds to satisfy needs which are more immediate and local. And, even if an airport has an exceptional vision of its long term, national status, it may conclude that the power of its opponents is sufficient to undermine most airport plans.

COMPETING FAA INTERESTS

While federal statutes give the Federal Aviation Administration some responsibilities for airports planning, and land use/community conflict resolution, the same laws state the Agency may not interfere with airport "proprietary powers and rights." Additionally, airport matters must compete for FAA resources with the agency's aircraft safety and air traffic control missions. These and the obligations to commercial air carriers, the Office of Management and Budget, and the Defense Department, frequently restrict the FAA's interest in airport problems.

AIRCRAFT NOISE REDUCTION

For two decades the FAA has had the statutory responsibility to prescribe standards and regulations to control and abate aircraft noise. Given the Agency's experience with aircraft certification, the FAA has published regulations requiring air carriers to use aircraft engines which are quieter than those used twenty years ago. While these regulations have been an important step in reducing noise levels around airports, many complain that the FAA should adopt a stricter, more comprehensive noise control program. The Agency's failure to adopt such measures underscores the competing forces which influence FAA decision making. Reasons for the Agency's failure to take more aggressive action include: economic impacts on air carriers; intrusions into perceived local government prerogatives; erosion of air traffic controller's discretionary authority over flight operations near airports; and impacts on the federal budget.

AIRPORT VICINITY LAND USE PLANNING

Beginning in the early 1960s studies of federal airport policy recommended a greater FAA role in promoting compatible land uses in the vicinity of airports. Unfortunately, the Agency was only marginally involved in local land use planning until 1979, when Congress directed the FAA to establish a program to measure airport noise exposure levels and to assist airports in developing noise compatibility initiatives. Since that date the Agency has published federal guidelines for airport noise control and land use compatibility planning, and has administered federal grants to encourage such efforts. But, many have criticized the FAA for setting up a good program on paper, but then not training or participating with airports in the development of plans. Also, the FAA has not made clear the national interests requiring consideration during such planning. The ab-

sence of federal representation during planning, and the lack of defined federal standards, leads to controversy when the FAA later exercises its authority to disapprove some or all of the locally-negotiated actions. The FAA's failure to provide resources for training and agency participation in planning is linked: to federal concerns about disrupting local "proprietary" functions; to federal deficit reduction measures; and to the perceived priority needs of air traffic control.

MANAGEMENT OF AIRSPACE NEAR AIRPORTS

As flight corridors to and from airports have become congested in the last decade, the FAA has sought to increase the number of such routes to enhance system capacity. But, such changes create noise over previously quiet neighborhoods. In many cases the residents of these areas become politically active in fighting the intrusion. Because of diverse governmental accountability, and fragmented responsibility for community issues within the FAA, the early identification and resolution of these concerns have been poor. Because of congressional pressure the Agency is now taking a hard look at its planning and management structure to improve communications with local governments. But, such improvements are difficult to accomplish because of: budget constraints; air traffic controllers' prerogatives; and local "proprietary" rights.

PLANNING FOR A NATIONAL SYSTEM OF AIRPORTS

Since 1946 Congress has directed the regular publication of a plan for a national system of airports. Conceptually, such a plan should: be based on credible airport activity forecasts; clearly define federal interests in airports; and prioritized actions to assure airport services for the Nation. But, the biannual plan published by the FAA has been heavily criticized for accomplishing none of these. While the Agency's document lists airport projects desired by individual airports and some state agencies, there is little analytical work accompanying the cataloguing. While numerous pressures influence FAA's plan, two of the most important are: the Office of Management and Budget's opposition to any plan which could be used to demand increases in federal expenditures; and the potential for opposition from congressmen whose districts might lose federal grant funds due to a reordering of national priorities.

LAND ASSEMBLY TO MEET FUTURE AIRPORT REQUIREMENTS

In a 1977 report to Congress the FAA stated that the acquisition of significant real property interests was vital to ensure future airport system capacity. Fortunately, some land has been made available through the closure of obsolete military bases, or through the joint military/civil use of existing bases. Also, a few communities have had the foresight to

purchase or hang onto additional property for future airport needs. But, these events have occurred, and continue to occur, without much FAA leadership. Today the need for more airport land continues to grow much faster than the ad hoc response to the problem. Nevertheless, the FAA has relative few employees responsible for assisting airports acquire land, nor does the Agency have specific goals for land assembly needed for the national system. Again, the FAA's failure to dedicate resources to this purpose can be traced back to the deference for "proprietary" rights, and to emphasis from other forces within the Agency.

These conditions cause many citizens to perceive the nation's air transportation system as a craft without a pilot: an ad hoc, leaderless association of governments, planes, land, and runways. Most previous efforts to attack the problems associated with the Nation's airports have narrowly focused on specific economic, legal, social, or governmental issues without taking a comprehensive view of the whole. The first two chapters here attempt such a panoramic view, though in almost outline form.

But, any changes in the status quo are not likely to occur until all private and public sector airport-related interests agree on certain root problems. Naturally, the selection of such roots runs the risk, once again, of ignoring the diversity and complexity of the puzzle. Nevertheless, this paper concludes that the root issues are all closely associated with problems of accountability and planning.

Given the decades of division over how to approach airport issues, it is assumed that such root problems must be paired up with bold leadership in order to change the status quo. Anticipating the needs of such leadership, this paper concludes with proposed airport policy principles for public debate, and recommended actions to improve accountability and planning.

Airport Policy Principles

POLICY PRINCIPLE ONE: *Since Airport Problems Cannot be Solved by a Single Institution or Government Authority, All Affected Groups Must Actively Cooperate in Formulating and Supporting Actions to Increase Fairness, Efficiency, and Accountability.*

POLICY PRINCIPLE TWO: *Since Airports in the United States Operate Under a Citizen Franchise Requiring Public Confidence, All Airport Decision Makers Must Actively Account for Public Concerns in Planning and Implementation.*

POLICY PRINCIPLE THREE: *Aviation Industry Groups and Various Levels of Government are all Responsible for Resolving Dis-*

PUTES OVER AIRPORT NOISE, INCLUDING PROVIDING "JUST COMPENSATION" TO PROPERTY OWNERS AND BALANCING THE MANY GENERAL WELFARE NEEDS TIED TO AIRPORTS.

POLICY PRINCIPLE FOUR: *THERE ARE CERTAIN AIRPORT-RELATED ISSUES OF NATIONAL CONCERN WHICH MUST BE CLEARLY DEFINED AND ACCEPTED.*

POLICY PRINCIPLE FIVE: *ASSUMING THAT THE FAILURE TO CONTROL INCOMPATIBLE LAND USES ON AND IN THE VICINITY OF AIRPORTS HARMS BOTH PUBLIC AND PRIVATE INTERESTS, SUBSTANTIVE AND PROCEDURAL STANDARDS FOR AIRPORT AREA LAND USE PLANNING CAN REDUCE INCONSISTENCY, INEQUITY, AND INEFFICIENCY.*

POLICY PRINCIPLE SIX: *PUBLIC ACQUISITION AND EFFECTIVE MANAGEMENT OF AIRPORT REAL PROPERTY INTERESTS ARE ESSENTIAL FOR THE LONG RANGE NEEDS OF AVIATION IN THE UNITED STATES.*

POLICY PRINCIPLE SEVEN: *IF LIABILITY FOR INJURY CAUSED BY AIRCRAFT NOISE WAS SHARED BY THOSE PRIVATE AND PUBLIC INTERESTS INVOLVED IN AVIATION ACTIVITY AND AIRPORT VICINITY LAND USE CONTROL, SOME OF THE BARRIERS TO COOPERATIVE AIRPORT DECISION MAKING COULD BE REMOVED.*

POLICY PRINCIPLE EIGHT: *IMPORTANT ACHIEVEMENTS IN AIRPORT DECISION MAKING WILL NOT OCCUR WITHOUT TALENTED AND COMMITTED LEADERS FROM THE PUBLIC AND PRIVATE SECTOR.*

CONGRESS RECOMMENDATIONS

CONGRESS RECOMMENDATION ONE: *AMEND FEDERAL AVIATION LAW TO MORE CLEARLY DEFINE AIRPORT "PROPRIETARY POWERS AND RIGHTS" TO PREVENT THE FEDERAL AVIATION ADMINISTRATION FROM GIVING UNDUE DEFERENCE TO AIRPORT PROPRIETORS WHEN INTERSTATE AIR COMMERCE INTERESTS ARE AT STAKE.*

CONGRESS RECOMMENDATION TWO: *TAKE ACTION TO SPREAD THE LEGAL LIABILITY FOR AIRCRAFT NOISE INJURIES AMONG BOTH PUBLIC AND PRIVATE SECTOR INTERESTS WHICH ARE RESPONSIBLE FOR THE CONTROL OF AIRCRAFT NOISE OR OF THE PHYSICAL ENVIRONMENT THROUGH WHICH THE NOISE EMANATES.*

CONGRESS RECOMMENDATION THREE: *ACT TO INCREASE THE PARTICIPATION AND ACCOUNTABILITY OF AIRCRAFT OPERATORS, AND LOCAL GOVERNMENTS HAVING JURISDICTION OVER AIRPORT VICINITY LAND USE CONTROL IN NOISE COMPATIBILITY AND NATIONAL AIR TRANSPORTATION SYSTEM PLANNING.*

DEPARTMENT OF TRANSPORTATION RECOMMENDATIONS

DOT RECOMMENDATION ONE: *IN CLOSE CONSULTATION WITH THE DIVERSE AIRPORT INTEREST GROUPS, DEVELOP PROCEDURES AND THE FORMAT FOR A NATIONAL AIRPORT SYSTEM PLAN WHICH WILL SERVE AS THE PRIMARY AIRPORT POLICY AND LONG RANGE PLANNING DOCUMENT FOR THE NATION.*

DOT RECOMMENDATION TWO: *ESTABLISH A NATIONAL AIRPORT REAL PROPERTY ACQUISITION PROGRAM WITH SPECIFIC GOALS INCLUDING: THE IDENTIFICATION AND PRIORITIZATION OF LONG RANGE NATIONAL AIRPORT SYSTEM REAL PROPERTY REQUIREMENTS: THE TRAINING OF AIRPORT PROPRIETORS IN THE PLANNING AND ACQUISITION OF REAL PROPERTY INTERESTS FOR AIRCRAFT NOISE ABATEMENT AND FUTURE AERONAUTICAL PURPOSES: AND THE INCREASED USE OF AVAILABLE FEDERAL PROPERTY FOR NATIONAL AIR TRANSPORTATION SYSTEM PURPOSES.*

DOT RECOMMENDATION THREE: *AFTER STUDYING FEDERAL AND STATE LAND USE CONTROL INITIATIVES (SUCH AS FLOODPLAINS, COASTAL ZONES, AND SO FORTH), ADOPT APPROPRIATE FEDERAL PROCEDURES, STANDARDS, AND INCENTIVES TO REDUCE INCOMPATIBLE DEVELOPMENT IN THE VICINITY OF NATION SYSTEM AIRPORTS.*

DOT RECOMMENDATION FOUR: *ENSURE THAT THE FAA AIRPORT SERVICES MANPOWER IS ADEQUATE TO REGULARLY PARTICIPATE WITH AIRPORT PROPRIETORS IN NEGOTIATING INDIVIDUAL NOISE COMPATIBILITY AND CAPACITY ENHANCEMENT AGREEMENTS.*

DOT RECOMMENDATION FIVE: *EVALUATE THE NEED FOR MORE COMMUNITY RELATIONS, REAL ESTATE, AND URBAN PLANNING PROFESSIONALS WITHIN THE NATIONAL AIR TRANSPORTATION SYSTEM; AND ADOPT APPROPRIATE BUDGET INITIATIVES TO INTEGRATE SUCH SKILLS INTO FEDERAL AVIATION ADMINISTRATION AND AIRPORT PROPRIETOR EDUCATION, PLANNING, AND DECISION MAKING.*

II. AIRPORTS IN THEIR INSTITUTIONAL SETTING

A. AVIATION ACTIVITY AND AIRPORTS ARE IMPORTANT TO UNITED STATES ECONOMIC, SOCIAL, AND INTERNATIONAL POLICY

1. RAPID AIR TRANSPORT OF PEOPLE AND GOODS AFFECTS THE ECONOMIC WELL-BEING, HEALTH, AND WELFARE OF THE NATION

The United States has about 6,000 public-use airports[1] serving nearly all cities and small communities in the nation. Connecting these

1. There are 2.3 million acres in the United States dedicated to airport use. H. FREY & R.

airports is a network of air routes, defined by navigational aids, which channel the flow of approximately 3,600 commercial and 220,000 general aviation aircraft. Flights along these routes, as well as operations in the vicinity of airports, are monitored and controlled by a system of ground-based surveillance equipment and communication links.[2]

For the past three decades this system has experienced an exponential growth in commercial transportation activity.[3] Daily enplanements of passengers at U.S. airports have increased from 50,000 passengers each day in 1950 to over one million passenger enplanements daily today.[4] In 1987, among public modes of long distance transport, aviation accounted for more passenger miles than all other modes combined.[5] The increased reliance on air transportation is also illustrated by the fact that seventy-three percent (or 130 million) of the adult U.S. population have flown at some time in their life on an airplane, up from forty-nine percent in 1971.[6]

Matching this growth is the significant impact of aviation and related economic activity on the United States. In 1987, economic activity associated with aviation totalled $522 billion[7] and employed 8 million people or 7.3% of the workforce.[8]

In addition to such economic impact, air transportation has caused changes in American institutional and personal conduct. During the last two decades, American business, governmental, scientific, technological,

---

HEXEM, MAJOR USES OF LAND IN THE UNITED STATES: 1982 (Dep't of Agriculture Econ. Rep. No. 535 (1985)).

2. The Federal Aviation Administration operates 399 airport control towers in the busiest airports, 22 enroute centers to manage the flow of aircraft between airports, and 302 flight service stations that provide weather and related information to pilots. NAT'L COUNCIL ON PUBLIC WORKS IMPROVEMENT, FRAGILE FOUNDATIONS: A REPORT ON AMERICA'S PUBLIC WORKS 150 (1988) [hereinafter FRAGILE FOUNDATIONS].

3. The number of air revenue passenger miles in the United States increased from 163 billion in 1977 to 329 billion in 1987. DOT, NATIONAL TRANSPORTATION STATISTICS (DOT-TSC-RSPA-89-1, (1989)).

4. NATIONAL COUNCIL ON PUBLIC WORKS IMPROVEMENT, THE NATION'S PUBLIC WORKS: REPORT ON AIRPORTS AND AIRWAYS 13-15 (1987) [hereinafter AIRPORT AND AIRWAYS]. The real cost of air travel has declined almost every year since 1960. *Id.*

5. PUBLIC WORKS HISTORICAL SOC'Y, PUBLIC WORKS AND THE SHAPING OF THE NATION 37-38 (1987) [hereinafter PUBLIC WORKS HISTORICAL SOC'Y]. Not only is air transportation the fastest and most reasonably comfortable way to travel over long distances, it is frequently the most economical. And in some instances it is the only way to travel, with rail of bus service nonexistent or inadequate. *Id.*

6. *Leaving on a Jet Plane*, AIRPORT HIGHLIGHTS, Nov. 28, 1988, at 2; Address by FAA Administrator T. Allan McArtor before the City Club of Cleveland (Feb. 12, 1988).

7. FRAGILE FOUNDATIONS, *supra* note 2, Airline, general aviation, and aircraft manufacturing revenues total about $75 billion annually. Total government spending to operate, maintain, and expand the Nation's airports and air traffic control system totals $8.2 billion each year.

8. PARTNERSHIP FOR IMPROVED AIR TRAVEL, THE ECONOMIC IMPACT OF CIVIL AVIATION ON THE U.S. ECONOMY (1989).

and educational institutions have come to rely on rapid travel, face-to-face meetings, and direct supervision in the execution of their responsibilities. Goods of all kinds—mail, bank checks, medical supplies, farm produce, machine parts—often travel by air.[9]

Air transportation can promote economies of scale, increase efficiency, and further specialization. It has increased competition among producers by expanding the area in which a product can be economically distributed. Such competition leads to lower prices and a wider choice of products for consumers.

Air transportation has also changed personal choice, offering alternative selections of medical care, schooling, places of recreation, and cultural enrichment.

Of course, these benefits are offset with the economic and social "costs" of air transport. Aviation activity produces accidents which result in loss of life and property. Also, aircraft annoy with noise, consume sizeable parcels of land, and use large amounts of fuel. In addition, legal and political disputes can clog courts and legislative chambers.

Such factors as the increasing reliance on air transportation, and the economic and social impacts of aviation, arguably demand national-level attention. In fact, considerable national debate and federal resources are committed to aviation-related matters, particularly aircraft safety. However, important questions continue to be raised whether the federal government has fully shouldered its national leadership responsibilities. This is especially true when the discussion turns to the federal government's accountability for and planning of a national air transportation system.

2. *Airports Have Become Indispensible Parts of Cities Throughout the United States*

Of the 6,000 U.S. airports, about 4,200 are owned by local governments including cities, towns, counties, port authorities, airport authorities, and special districts.[10] This local ownership and responsibility for airports has been welcomed by communities because of the significant

9. For a typical manufacturing firm, transportation expenses rank third in dollar outlays, behind direct materials and direct labor. For a large company this can mean hundreds of millions of dollars annually. Naturally, with such sums at stake, integrating transportation planning with other company activities and understanding transportation options is very important. In selecting a transportation mode a shipper will consider rate differences, and differences in service, routings, speed, reliability, packaging requirements, and the likelihood of loss or damage. R. LIEB. TRANSPORTATION: THE SHIPPER'S PERSPECTIVE 17-30 (1985).

10. Of the 980 airports in 1918 many were privately-owned golf courses, racetracks, or farms. M. GREIF, THE AIRPORT BOOK: FROM LANDING FIELD TO MODERN TERMINAL 25-26 (1979). Local governments moved in large numbers into airport ownership after World War II when surplus military airfields became available and the federal government made grants available for

economic benefits[11] associated with airport activity.[12] Also, for many communities an efficient[13] airport can promote civic pride[14] and consti-

---

airport land acquisition, and the construction of runways, taxiways, and aprons. FAA, THE AIRPORT: ITS INFLUENCE ON THE COMMUNITY ECONOMY 11, 27-28, 57-58, 72 (1967).

Nearly every state has an airport enabling act which authorizes subdivisions of the state to acquire, improve, maintain and operate airports for public use. In the sponsorship of these airports local governments may use both the state's eminent domain and police power. In the operation of airports, local governments are recognized as being engaged in a proprietary activity, with the responsibility to operate it as efficiently as a private proprietor would. In their responsibility for airports a unit of local government typically establishes rules/regulations in the following areas: tenant agreements and obligations; aircraft operating rules; environmental related requirements; compatible land use development; parking; public conduct; emergencies; and safety and security. C. RHYNE, AIRPORTS AND THE LAW 1-8 (1979); H. WOLFE & D. NEWMYER, AVIATION INDUSTRY REGULATION 79 (1985).

11. An airport's economic impact on a community is determined by adding airline and airport employee payroll, local purchases of supplies and services, capital expenditures, payments to government, expenditures for flight crew room rentals, and aviation visitor expenditures. Studies have shown that visitors who arrive in a community through an airport will spend considerably more money in the community than the visitor who arrives by other transportation. GENERAL AVIATION MANUFACTURER ASS'N, HOW TO LAND AND EXPAND AN AIRPORT IN YOUR COMMUNITY 2 (1976). *See also*, S. BUTLER & KIERNAN, MEASURING THE REGIONAL ECONOMIC SIGNIFICANCE OF AIRPORTS (FAA Report No. DOT/FAA/PP/87-1 (1986)); AIRPORTS AND AIRWAYS, *supra* note 4 at 111-12; PUBLIC WORKS HISTORICAL SOC'Y, *supra* note 5, at 38. Typically, such studies do not measure net economic impacts, which would include the cost of lost land value and similar losses due to environmental conditions. AIRPORT OPERATORS COUNCIL INT'L, MARKETING HANDBOOK 18-19 (1989); H. MERTINS, NATIONAL TRANSPORTATION POLICY IN TRANSITION 119-21 (1972).

A prime example of airport economic impact is the Atlanta Hartsfield Airport. With over 33,000 employees, the airport is the largest single employer in the state with a $1 billion annual payroll and $3.5 billion annually in local purchases. In 1985, 85% of the Fortune Magazine 500 companies had offices in the area. Carter, *A Commissioner Looks at "His" Airport*, AIRPORT FORUM, June 1985, at 38. Other airports reporting significant economic impacts are: Tulsa's $1 billion, Curtis, *Local Aviation Officials See Blue Skies Ahead*, TULSA BUS. CHRONICLE, July 5, 1988, at 7; Chicago's $9 billion, AIR TRANSPORT ASS'N, CHICAGO AND THE AIRLINES (Apr. 1987); St. Louis $2 billion, AIR TRANSPORT ASS'N, LAMBERT ST. LOUIS INTERNATIONAL AIRPORT (Oct. 1986); Nashville's $500 million, Harris, *New Airport a White Jewel*, ADVANTAGE, July 1987, at 26; Beatrice (Nebraska)'s $119 million, Worthington, *Pilot "Roll Book" Reveals Airport's Monetary Impact*, AIRPORT SERVICES, Sept. 1986, at 12; Tucson's $863 million, *Economic Impact,* AIRPORT HIGHLIGHTS, Nov. 28, 1988, at 8. For an excellent article on the impact of aviation in the State of Alaska *see* Fried, *Air Biggest Transport Segment*, ALA. J. COM., July 18, 1988, at 8 (discusses impact of deregulation, international air traffic, relations with the Soviet Union, changes in fleet size, air cargo).

Recently, some communities have become concerned that their long-term economic well-being may be impaired if they cannot provide increased airport services. Stewart, *Logan Airport's Grim Date with 2010*, Boston Globe, May 9, 1989, Economy sec. at 29; Thompson, *The Triad's Fight for Flight*, BUS. NORTH CAROLINA, Mar. 1989, § 1, at 52.

12. Like ports and harbors, the federal government has recognized the local government responsibility for airports. But, just as the federal government provided safe, navigable channels, the federal government has taken responsibility for the maintenance of safe airways.

13. The need for quality community infrastructure, including transportation public works, is well recognized. Kaplan, *Infrastructure Policy: Repetitive Studies, Uneven Response, Next Steps*, 25 URB. AFF. Q. 371 (1990); Rosenberg & Rood, *The Realities of Our Infrastructure Prob-*

tute a "geographical anchor"[15] for necessary aviation transportation.

Because of their size and related activity, airports have a very important impact on land use within communities.[16] The reasons for this influence are several:

- The use by the airport of large tracts of buildable acreage in urban settings where land is at a premium.
- An airport spawns numerous off-site activities which consume and control additional property.
- Airports typically influence development patterns in the vicinity of the airport[17]
- An airport's impact on the physical environment can be significant.
- An airport is usually served by extensive roadway systems and other public utility infrastructure.

Also, airports can provide important government services, such as support for natural disasters, law enforcement, life saving and rescue, forest fire fighting, and air national guard/armed services training.

---

lem, 7 MUN. MGMT. 84 (1985). The quality of an airport is determined by more than just the physical condition of the facilities. Among the most important performance characteristics of an airport are:

- the number and length of air traffic delays;
- the aviation safety record in the terminal control area;
- the ease of ground access for those served by the airport; and
- the existence of compatible land uses on and near the airport site.

NATIONAL COUNCIL ON PUBLIC WORKS IMPROVEMENT, FRAGILE INFRASTRUCTURE: A REPORT ON AMERICA'S PUBLIC WORKS 50 (1988). The National Council on Public Works Improvement gave aviation infrastructure a B- grade on its report card. *Id.* at 6.

14. In Alaska, which has no road system, residents express pride in their aviation system and their aircraft (considered a "native species"). Fried, *supra* note 11, at 8. With the recent major expansion of the Nashville Airport, community leaders announced that the dramatic increase in aviation activity was the biggest event since the pioneers first floated down the Cumberland River. Harris, *supra* note 11, at 26. "The driving force [behind ever increasing airport development] has consistently been the human desire to carry the innate mobility of mankind to its logical limits, to frontiers that have grown more distant with advances in human knowledge and the technology that puts it to work." J. VANCE, CAPTURING THE HORIZON: THE HISTORICAL GEOGRAPHY OF TRANSPORTATION 605 (1986). Also, airport development has been closely tied to America's consumption ethic, however, there is strong evidence that there is a national trend away from consumption. Americans are learning not to covet and may accept much less than the state-of-the-art. Allen, *Mammon in Jeopardy*, Wash. Post, May 21, 1989, at C1, col. 1.

15. For a discussion of airports as "geographical anchors", *see* J. VANCE, *supra* note 14, at 592-603. "Aviation is today an established method of transportation . . . the city that is without the foresight to build the ports for the new traffic may soon be left behind in the race of competition. Chalcedon was called the city of the blind, because its founders rejected the nobler site of Byzantium lying at their feet. The need for vision of the future in the governance of cities has not lessened with the years." Hesse v. Rath, 249 N.Y. 436, 164 N.E. 342 (1928).

16. ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT AIRPORTS AND THE ENVIRONMENT 271-90 (1975).

17. Land located near airports usually increases in value as the local economy benefits from the presence of an airport. Studies show that commercial land near major airports can increase in value by 400% or more in 10 to 15 years. PUBLIC WORKS HISTORICAL SOC'Y, *supra* note 5, at 38.

The significance and diversity of aviation activity impacts within a community mean that extraordinary attention must be given by local elected officials, business leaders, and residents to the airport and its operation. It is not enough merely to turn all aviation-related matters over to an able airport manager. Those communities which, in the short term, fail to integrate such issues into local planning and decision making, can expect increased costs later on in retaining adequate airport services.

Also, there are questions about the role of the local leadership in the *national* air transportation system. Do they have any responsibility to safeguard the federal government's substantial capital investment in airport land and infrastructure? To what extent are local government officers accountable for the expansion of airport capacity to meet future demand, when such actions are unwanted by airport neighbors?

3. *United States Aviation Activity is Important for the Nation's Status Within the International Community*

Beyond their local and national importance, airports play a role in international commercial activity. Today, the United States enjoys a significant advantage in international air transport, giving the domestic market strong access to the world-wide market.[18] Unlike most nations which have only one "gateway" airport, the United States has many. Through the exchange of landing rights between United States and foreign airports, the U.S. has obtained a favored position in foreign markets.[19] Also, the U.S. decision to deregulate its airline industry in 1978 gave a competitive edge over foreign regulated airlines.[20]

The nature and complexity of the United States' role in international aviation goes beyond the scope of this discussion. But, the same themes of accountability, planning, and leadership are assumed to apply in evaluating the nation's success or failure in the increasingly competitive world community.

---

18. International trade is an important consideration in deciding the amount of public works services required by a nation. Since World War II, the U.S. economy has become increasingly more integrated into, and dependent on, the world market. Contributing to this U.S. dependence has been the substantial reduction in import tariffs in all the major trading nations and the increasing multinational character of business. A recent U.S. Dep't of Commerce study forecasts a major surge in international activity in the mid-1990's, to the benefit of those countries which can transport goods and services rapidly at reasonable costs. OFFICE OF ECONOMIC AFFAIRS, U.S. DEP'T OF COMMERCE, EFFECTS OF STRUCTURAL CHANGE ON THE U.S. ECONOMY ON THE USE OF PUBLIC WORKS SERVICES, ch. 2 (Project No. PW 7-625, July 30, 1987).

19. Feldman, *In Pursuit of a 'Balance of Benefits'*, AIR TRANSPORT WORLD, Sept. 1989, at 67. In order to offset the United States' negotiation leverage, European countries want to band together to increase their bargaining power. Feldman, *U.S. Could Be Forced to Change Negotiating Stance*, AIR TRANSPORT WORLD, May 1988, at 19.

20. Wassenbergh, *New Aspects of National Aviation Policies and the Future of International Air Transport Regulation*, 13 AIR L. 18 (1988).

B. Conditions Arising Since the Deregulation of U.S. Airlines Aggravated Existing Physical Capacity and Institutional Accountability Weaknesses in the National Air Transportation System

1. A Surge in Air Traffic During the Last Decade, Along With Hubbing and Scheduling Practices of Commercial Airlines, has Increased Demand on the Aviation Infrastructure

Prior to the deregulation of the U.S. airline industry in 1978,[21] the Civil Aeronautics Board (CAB) assigned routes to commercial aircraft, thereby controlling the demand on the air transportation infrastructure.[22] The CAB also regulated the pricing of air transport services. Once these controls were abolished, the airlines adopted practices in an effort to increase their respective market share. Among the most important industry changes were hubbing, competitive scheduling of flights, and reduced air fares.

The idea of concentrating operations in a few hub airports was practiced before deregulation, but became much more common in the heightened competitive environment.[23] The prime purpose for hubbing is to allow an airline to increase the *frequency*[24] of operation. The economics of commercial aviation have shown that an airline which can increase its frequency of service can boost its proportional market share. Airlines can improve their frequency by routing passengers through fewer routes, using hub airports.[25] The conversion to a more intense hubbing system, however, has placed a great burden on the infrastructure of these major

---

21. R. DE NEUFVILLE, DEREGULATION OF AIR TRANSPORT—LESSONS FROM NORTH AMERICA (1986).

22. Before deregulation communities often got involved in promoting ticket sales to retain needed routes into their cities and towns. A 1960 publication of the National Association of State Aviation Officials suggested forty ways to promote community use of the airport. R. REDDING, COMMUNITY PLANNING FOR AIR TRANSPORTATION (1960).

23. R. DE NEUFVILLE, *supra* note 21; A. GHOBRIAL, ANALYSIS OF THE AIR NETWORK STRUCTURE: THE HUBBING PHENOMENON (1983); Morrison & Winston, *Intercity Transportation Route Structures under Deregulation: Some Assessments Motivated by the Airline Experience*, AM. ECON. REV., May 1985, at 57.

24. A. GHOBRIAL, *supra* note 23, at 17-20 (1983). Of course, an airline is constrained from engaging in excessive frequency competition by the need to maintain profitable load factors. Load factors within the 60 to 65 percent range seem to be the breakeven range. *Id.* at 39.

25. There are about 30 large hubs in the United States. Fawcett & Fawcett, *Congestion at Capacity-Constrained Airports: A Question of Economics and Realism*, TRAN. J., Summer 1988, at 42, 44; A. Lopuszynski, PERSPECTIVES ON AIRLINE HUBBING IN THE U.S. (1989) (unpublished manuscript available from the Forecast Branch, Headquarters, FAA). Additional communities continue to plan and market their airports to attract hub business. Benmour & Kamuf, *Airport Plan May Help Lure Hub*, BUS. FIRST—LOUISVILLE, June 27, 1988, § 1, at 1. But, the creation of new hubs may have peaked. Kyle, *Hoping to be a Hub*, GOVERNING, Apr. 1988, at 48; Proctor,

airports.[26]

Air carriers also recognized that their market share would depend on the ability to satisfy passenger preferences for travel times.[27] Consequently, airlines tightly scheduled their flights into specific time windows to assure the best competitive situation. As a result many airports experience "peak hour" pressures when many planes and passengers converge on the terminals.[28]

Along with hubbing and scheduling practices, the airlines lowered

---

Capacity Constraints Will Influence Fleet Composition Through 2010, AVIATION WEEK & SPACE TECH., Nov. 21, 1988, at 87.

America's hubbing experience has influenced airline routing systems overseas. Hansen & Kanafani, *International Airline Hubbing in a Competitive Environment*, 13 TRANSP. PLAN. & TECH. 3 (1988).

A disadvantage of hubbing and congestion at a few airports is the ability of the dominant carriers to take strategic actions that undercut smaller rivals. Such an oligopoly situation or competitive barriers have led some to label the major airports "fortress hubs." Airlines defend their hubbing practices by arguing that it allows them to use planes more efficiently and therefore give passengers better fares and service. *See* Borenstein, *Airline Merger, Airport Dominance, and Market Power*, 80 AM. ECON. REV. 400 (1990); Feldman, *Path to Additional Airport Capacity has Many Potholes*, AIR TRANSPORT WORLD, Nov. 1988, at 18; Phillips, *Structural Change in the Airline Industry: Carrier Concentration at Large Hub Airports*, TRANSP. J., Winter 1985, at 18; Street, *Kind of Public Utility Commission Proposed to Oversee U.S. Airports*, AIRPORT F., Feb. 1989, at 31; *AOCI Testifies on Airline Concentration at U.S. Hubs*, AIRPORT HIGHLIGHTS, Sept. 26, 1988, at 2; *Senate Aviation Leaders Concerned about Hub Concentration*, AIRPORT REPORT, May 1, 1989, at 2.

26. Many have cited hubbing, and the resulting congestion, as a dramatic negative side-effect of airline deregulation. DEMPSEY, FLYING BLIND: THE FAILURE OF AIRLINE DEREGULATION (1990); Fawcett & Fawcett, *Congestion at Capacity-Constrained Airports: A Question of Economics and Realism*, TRANSP. J., Summer 1988, at 42, 43; Hahn & Kroszer, *The Mismanagement of Air Transport: A Supply-Side Analysis*. PUB. INTEREST, Spring 1990, at 100; Kaplan, *The Changing Airline Industry*, in REGULATORY REFORM: WHAT ACTUALLY HAPPENED 40, at 68-69 (L. Weiss & M. Klass eds. 1986); Wood, Fletcher & Holley, *Regulation, Deregulation, and Re-Regulation: An American Perspective*, 1987 BYU L. REV. 381; Kahn, *After Airline Deregulation*, N.Y. Times, Aug. 13, 1989, sec. 3, at 2, col. 3; McGinley, *Regulatory Revival: Federal Regulation Rises Anew in Matters That Worry the Public*, Wall St. J., Apr. 21, 1987, at 1, col. 6. *See also* Brown, *The Regulatory Policy Cycle and the Airline Deregulation Movement*, 66 SOC. SCI. Q. 552 (1985).

27. Passengers select an airline for travel based on frequency of service, travel time, fare, aircraft type, and flight schedule. A. GHOBRIAL, *supra* note 23, at 14.

28. During the summer of 1987, airlines scheduled 33 flights to arrive at Chicago O'Hare at exactly 9:15 on weekdays. Similarly, at Atlanta's Hartsfield Airport, airlines scheduled between 41 and 73 operations during various peak 15-minute intervals despite the airport's ability to handle only 37 flight operations in those periods. Fawcett & Fawcett, *supra* note 26, at 42, 44.

On the issue of scheduling, the view point of the airport manager typically differs from the air carriers. Rather than enhancing airline market share, the airport is more concerned with the safe and orderly movement of aircraft and ground transportation, and limiting environmental impacts of the airport. But, the airport manager seldom participates in the scheduling of aircraft which use the facility. N. ASHFORD, H. STANTON, & C. MOORE, AIRPORT OPERATIONS 26-51 (1984). *See also* Mayer, *The Late, Late Show: How a Priority Flight System Can Reduce the Cost of Air Traffic Delays*, TRANSP. RES. REC. No. 1161, at 14 (1988).

fares to attract more travelers. These lowered fares occurred just as the Nation was entering a strong economic recovery. These factors combined for a near doubling in air passenger activity in just a few years.[29]

While these events have led to costly congestion and delays at some airports, the airlines are likely to adhere to them because of the significant offsetting economic benefits.[30] Also, the regulatory mechanism which could require air carriers to be accountable for such costs as congestion and delay has been partly dismantled.

2. *An Airport's Capacity to Accommodate Surges in Air Traffic is Frequently Finite; and is Hindered by Fragmented Governmental Responsibility*

Given the size, technology mix, and multiple-simultaneous activities associated with an airport, the planning for future adequate capacity is often troublesome. One method of analyzing airport capacity is to break it down into "airside" and "landside" capacity.[31] "Airside" capacity is the number of aircraft movements that the airport and the supporting air traffic control system can accommodate in a unit of time, such as an hour. Among several factors which determine airside capacity are:

- the length of a runway needed for safe aircraft operations;[32]
- the number and location of runways/taxiways to handle multiple aircraft movement;
- the separation required between approaching aircraft necessary to limit problems associated with wake vortices;[33]
- the types of navigational aids in use for proper surveillance and control of aircraft;
- the number of gates to accommodate aircraft; and
- the need for noise abatement operating procedures to limit environmental impacts.

---

29. *Lack of Airport Capacity Creates "Crisis of Confidence" For Industry*, AVIATION WEEK & SPACE TECH., Nov. 21, 1988, at 98. Also, during the 1980's air cargo activity surged further burdening airport capacity. Lacher, *Airport Acquisitions*, BUS. REC., Sep. 14, 1987, § 1, at 1.

30. TRANSPORTATION RESEARCH BOARD, FUTURE DEVELOPMENT OF THE U.S. AIRPORT NETWORK 7 (1988).

31. *See* DOT/FAA, AIRPORT CAPACITY ENHANCEMENT PLAN, ch. 1 at 6 (DOT/FAA/CP/88-4 (1988)); TRANSPORTATION RESEARCH BOARD, FUTURE DEVELOPMENT OF THE U.S. AIRPORT NETWORK 15 (1988); J. WILEY, AIRPORT ADMINISTRATION AND MANAGEMENT 102 (1986).

32. *See* Carr, Reaveley & Smith, *New Turnoff for "Optimum Runway Occupancy Times,"* AIRPORT F., June 1980, at 21; Caves, *Aircraft Operating Characteristics*, in AIRPORT OPERATIONS 85 (N. Ashford, H. Stanton & C. Moore eds. 1984); Collet, *The Importance of Runway Capacity: An Analytical Approach*, AIRPORT F., Apr. 1980, at 63; Jelaska & Jovanovic, *A Method to Determine Runway Capacity*, AIRPORT F., Aug. 1982, at 42.

33. Wake vortices are eddies and turbulence generated by the flow of air over the wings and fuselage. They trail behind an aircraft and can upset the stability of following aircraft. The heavier the lead plane, the stronger the vortex which follows it. Light planes following heavy planes can experience considerable difficulty with wake vortices.

Add to these certain "landside" considerations; such as size of the terminal and the bag handling facilities, adequacy of ground access, and capacity of parking areas.

As traffic activity increases these and many other factors become important in handling aircraft, passengers, and goods. Usually, more than one unit of government is responsible for the various capacity factors, complicating the overall management of capacity. In the first decade after deregulation, as traffic grew at an accelerated rate, there was not a commensurate increase in coordination among the local governments and the federal government. Consequently, physical capacity solutions needed to handle the growth were slow in coming.[34]

3. *The Surge in Aviation Activity, Along With the Finite Capacity of Aviation Infrastructure, Aggravated the Causes of Delay in the National System of Airports and Called for an Increased Federal Government Role*

With the surge in commercial aviation activity during the 1980's, including the airlines' tight scheduling and hubbing practices, many have argued that additional, unacceptable[35] delays may be created because of

---

34. Within the last couple of years the Federal Aviation Administration and airport operators at several major airports have created airport capacity task forces to identify and implement solutions to the congestion and delay problems. But, such efforts are not widespread throughout the national system.

35. In 1988 the issue of air traffic congestion and delay received public exposure when *U.S. News and World Report* and *Time* magazines featured the problem in their publications. Koepp, *Gridlock! Congestion on America's Highways and Runways Takes a Grinding Toll*, TIME, Sept. 12, 1988, at 52; Witkin, *Air-Travel Can Only Worsen if the Crunch on the Ground Doesn't Improve*, U.S. NEWS & WORLD REP., Jan. 25, 1988, at 32.

While there is considerable debate over how to value time for the delayed traveler or shipper, the FAA estimates the loss at about $3 billion annually. DOT/FAA, AIRPORT CAPACITY ENHANCEMENT PLAN, ch. 1 at 11 (DOT/FAA/CP/88-4 (1988)). *See also* K. GEISINGER, AIRLINE DELAY: 1976-1986 (FAA Report No. FAA-APO-88-13 (1989)); GRONAN, THE VALUE OF TIME IN PASSENGER TRANSPORTATION: THE DEMAND FOR AIR TRAVEL (1970); S. RHOADS, POLICY ANALYSIS IN THE FEDERAL AVIATION ADMINISTRATION 66-69 (1974); Hensher & Truong, *Valuation of Travel Time Savings*, 19 J. TRANSPORT ECON. & POL'Y 237 (1985). Arguably, this cost has been offset by the lower fares and additional routes brought by deregulation. The value to consumers of these improvements is estimated to be $12 billion a year. Nash, *Assessing the Effects of Airline Deregulation*, N.Y. Times, Mar. 20, 1988, § 4, at 5, col. 1.

The airlines' losses also approximate $2 billion annually. *Airline Group Reports ATC Delays*, AVIATION WEEK & SPACE TECH., May 30, 1988, at 124 (average cost of operating a transport in flight is $2,174 per hour; ground holds cost airlines $600 per hour). In 1987 planes waiting to takeoff or circling for a landing used about 500 billion gallons of jet fuel, or 3.6% of 1987's total jet fuel consumption. Koepp, *Gridlock! Congestion on America's Highways and Runways Takes a Grinding Toll*, TIME, Sept. 12, 1988, at 52. That same year delays caused U.S. airlines to lose the equivalent of 100 days in aircraft operating time every day. Based on typical 10 hours per day for each aircraft, the losses implied that airlines had to add 235 aircraft to their fleets to

limited aviation infrastructure capacity.[36] Others point out, however, that solving delay problems should not focus exclusively on infrastructure limitations.

Of course, congestion and delay are inherent in a system as complex as the national system of air transportation. Also, there are intense interactions between many components of the system.[37] Disruptions in one part of the system can have a profound affect on the other parts. Thus, a bottleneck on a freeway leading to the airport, or lack of terminal parking, or long lines at terminal check-in, or congestion on a taxiway, can each cause a ripple effect[38] elsewhere in the system. Naturally, the strength of these interactions has intensified with the increased use of airline hubs with their closely timed arrivals and departures.

While figures showing congestion and delay[39] began to increase during the early years after deregulation, delays have declined somewhat in the past two years.[40] Much of the improvement can be attributed to changes in the FAA's control of the traffic. Some claim, however, that without more investments in improved ATC equipment and airport infrastructure, the system will experience dramatic delay increases in the future.[41]

---

compensate for delays. McLain, *Airport Congestion Will Limit Future Traffic Growth*, FIN. TIMES, Sept. 2, 1988, at 9.

For a lively debate on the issues of delay and scheduling see *Reauthorization of the Airport and Airway Trust Fund and Related Issues, Hearings Before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation*, 100th Cong., 1st Sess., 27-43 (1987).

36. *E.g.*, Scearce, *Will Airport Congestion Limit U.S. Airline Industry Growth?* AIRPORT F., Dec. 1985, at 6.

37. *See* AIRPORTS AND AIRWAYS, *supra* note 4, at 10.

38. A hiccough caused by an initial 15-minute delay may not work itself out of the system for several hours. Poritzky, *Airports, Airports—Where's the Capacity?*, AEROSPACE AM., Jan. 1985, at 27.

39. Delay is difficult to measure and there is no industry-wide agreement on an appropriate definition of delay. The FAA maintains two systems for continuously monitoring delay: The National Airspace Performance Reporting System (NAPRS), consisting of reports from air traffic control facilities of serious delay conditions and causes of delay; and the standardized delay reporting system (SDRS), which are reports on the length of delay on four phases of flight (gatehold, taxi-out, airborne, taxi-in) submitted by selected air carriers. Based on the data collected, the FAA rated 18 U.S. airports as "seriously congested" in 1987, meaning each airport experienced more than 20,000 hours of aircraft delays. DOT/FAA, AIRPORT CAPACITY ENHANCEMENT PLAN, ch. 1 at 7 (DOT/FAA/DP/88-4 (1988)); *McArtor Calls for Blueprint to Increase Airport Capacity*, AVIATION WEEK & SPACE TECH., Jan. 18, 1988, at 61.

40. In the first years after deregulation an average of 1600 flights per day experienced delays of more than 15 minutes. The averages for the last three years have fallen: 1986 (1,144 flights per day); 1987 (1076); 1988 (1022). *1988 Flight Delays Hit Three-Year Low*, FAA NEWS RELEASE, Feb. 17, 1989. *See also* DOT/FAA, AIRPORT CAPACITY ENHANCEMENT PLAN (DOT/FAA/CP/88-4 (1988)).

41. Severe shortages in airport capacity have been claimed for twenty years. Butwin, *The Great Airport Dilemma*, SATURDAY REV., Jan. 6, 1968, at 49; Hotz, *Choking on Prosperity*, AVIATION WEEK, Aug. 21, 1967, at 11; Jones, *Airports Face the Great Passenger Flood*, AM. AVIA-

Ultimately, the determination of how much delay is acceptable, and what changes must be made to reduce delay, are policy matters.[42] While some delay may be avoided by constructing more airports or purchasing system-wide advanced microwave landing systems, the costs may exceed the potential benefit. If costs for such additional infrastructure remain high, policy makers may have to turn to other less costly alternatives.

Of course, the concern is who will make such policy choices. To date, the federal government has accepted only limited responsibility, primarily in the area of air traffic control improvements. There has been little national planning and consideration of the long-term benefits of airport real estate acquisition, mitigation of environmental impacts, private-sector economic incentives, and regulatory measures to enhance the Nation's aviation system capacity.

4. *Among the More Controversial Constraints on the National System of Airports has Been the Increase in Airport Use Restrictions in Response to Local Noise Complaints*

One byproduct of the increase in aviation activity has been the difficulty that the airport managers have in dealing with airport neighbors concerned about noise. Many neighborhoods seeking reductions or elimination of aircraft noise have mobilized. For an increasing number of airports, the more politically expedient, cost-effective means of meeting neighbors' demands has been to adopt restrictions on the use of the air-

---

TION, May 1966, at 32; *Homing in on the Airport Crisis*, BUS. WEEK, Nov. 18, 1967, at 115; *The Airport Crisis: No Place to Land*, BUS. WEEK, Sept. 30, 1972, at 43. Some are skeptical about calls for more airport infrastructure. Oates, *On the Measurement of Congestion in the Provision of Local Public Goods*, 24 J. URB. ECON. 85 (1988). A rush to capacity enhancement may be shortsighted for several reasons:

- There is no guarantee the airlines are committed to any particular combination of hubs, or even to hubbing itself.
- There is no real "passenger rebellion" when drastic action requires a rescheduling of flights.
- The "public demand" for new airports is not high.
- Recessions and new competitive concepts make investment in expensive new airport enterprises tenuous.
- There are far too many existing facilities that are underutilized.

Feldman, *Path to Additional Airport Capacity Has Many Potholes*, AIR TRANSPORT WORLD, Nov. 1988, at 18.

Of course, the study of "crisis" is a productive academic exercise for economists, political scientists, and social scientists. *E.g.*, M. CASTELLS, THE ECONOMIC CRISIS AND AMERICAN SOCIETY (1980); O. GIARINI, THE DIMINISHING RETURNS OF TECHNOLOGY: AN ESSAY ON THE CRISIS IN ECONOMIC GROWTH (1978); P. MATTICK, ECONOMIC CRISIS AND CRISIS THEORY (1981); J. O'CONNOR, THE MEANING OF CRISIS (1987).

42. OFFICE OF TECHNOLOGY ASSESSMENT, AIRPORT SYSTEM DEVELOPMENT: SUMMARY 8-9 (OTA-STI-232 (1984)).

port.[43] In some cases airports have limited the types of aircraft which may use the airport or the hours of operation.

Given the intense component integration in the aviation system nationally, many of these use restrictions have a ripple effect elsewhere.[44] Such effects have led the airlines to challenge these use restrictions as detrimental to national interests. As will be discussed hereafter, some of the blame should fall on the federal government. The complexity of solving such problems as airport noise and airport capacity call for a comprehensive, cross-governmental response under the leadership of the FAA.

C. *After Decades of Experience, Airport Neighbors Have Gained Considerable Leverage in Influencing Airport Decision Making*

Even prior to the jet age, some homeowners near airports claimed that aircraft were a nuisance and sought to influence airport activities.[45] With the introduction of jet aircraft[46] and the surge in air traffic in the United States, the conflicts between airports and their neighbors seem to

---

43. *See generally* Ellett, *The National Air Transportation System: Design by City Hall?*, 53 J. AIR L. & COM. 1 (1987). By 1986, over 400 airports had adopted some form of use restriction in response to noise. FAA, NOISE CONTROL STRATEGIES (FAA-EE-86-02, (1986)). Many of the restrictions can be imposed with little or no economic consequences for the airport. They can, however, increase operating costs for the airlines.

44. The most dramatic illustration of use restriction impacts occurs when an airport imposes a nighttime curfew. A 1988 proposal to restrict flights into National Airport after 10:00 p.m. would have cut 12 daily flights landing between 10:00 p.m. and midnight. This closure would have affected several other major hubs which are able to "sweep" the passengers in time to arrive in Washington D.C. before midnight. The two-hour curfew would affect 400,000 passengers annually. Phillips, *The Fleet Serving National is Getting Quieter Week by Week*, Wash. Post, Aug. 28, 1988, § B, at 8.

The problem of nighttime curfews was highlighted in 1985 when Congress was considering a uniform poll closing time for Presidential election years. The bill would have delayed taking the Pacific Time Zone states off Daylight Savings Time until after the November election. The non-uniform change in daylight savings time would have disrupted 28 westbound flights which could not have arrived in time to comply with nighttime restrictions at four West Coast airports. Letter from William Burhop to Congressman Bill Frezel (Nov. 4, 1985), *reprinted in* 131 CONG. REC. H10023 (daily ed. Nov. 12, 1985). *See also* 135 CONG. REC. H941 (daily ed. Apr. 5, 1989).

For a thorough review of the legal issues raised by curfews see Los Angeles City Attorney Report No. R88-2067, May 23, 1988 (Re Van Nuys Airport: Report on the Legality of a Nighttime Curfew Ordinance).

45. Ainsworth, *Are Airports Nuisances? Nonsense!*, AIRPORTS, Mar. 1946, at 45; Hughes, *Noise vs. the Air Age*, AIRPORTS, Apr. 1946, at 68.

46. The initial conversion to jet aircraft was very disruptive for many communities. Not only did the jet engine produce a high frequency sound, but also jet aircraft pilots used a longer and more shallow (power-on) approach than the conventional propeller aircraft, jet aircraft made a much flatter early climb (due to the jet's high stall speed and its high take-off weight caused by the large amount of fuel carried) than conventional aircraft, and jet aircraft used a larger turning radius.

During the early days of jet noise, protestors threatened to shoot planes out of the sky or

have intensified.[47]

While a significant portion of those living near an airport tolerate aviation activity,[48] there is always a strong core of individuals who are vocal, if not downright rowdy, when given an opportunity to express their thoughts about airport expansion plans. When considered in a less emotional setting, many of the concerns of airport neighbors are worthy or recognition.[49] Common comments from airport neighbor[50] are:

- Can we expect the noise to increase in the future?
- I believe the value of my home is less because of the noise exposure.
- Does the airport have a long range plan to meet both aviation and community needs?
- My real estate agent told me I will have a hard time selling my home.
- I am more worried about single aircraft overflights, than the "average noise" measures you airport folks use.
- I can live with the daytime noise, but the nighttime flights are too much.
- How come the military aircraft are so much noisier?
- Isn't there someone I can call if the noise becomes too bothersome?
- I have attended several of these community meetings and nothing ever seems to happen.
- Does the airport have any money to pay for the noise damage? When can I expect to be compensated?
- Are hazardous chemicals or materials being flown over my house?
- Do the airlines have de-icing equipment? Is it used?
- I feel like I'm being manipulated.
- How come you don't want to know about our neighborhood, our schools, our lives?
- I think the vibration of my walls and windows is worse than the noise.
- Will the noise cause hearing loss?

These and other comments from airport neighbors show a need for better education of local residents about aviation matters and increased

---

blow up ATC control towers. G. STEVENSON, THE POLITICS OF AIRPORT NOISE 16-17, 100, 120 (1972).

47. Around a busy airport the envelope of moderate noise levels can cover 40 to 50 square miles. Severe noise impacts for the same airport can occur in areas up to 20 square miles. DOT/FAA, ESTABLISHMENT OF NEW MAJOR PUBLIC AIRPORTS IN THE UNITED STATES, ch. 5 at 3 (1977).

48. *See* Elsner, *Little Fury over Sounds of Midway*, Chicago Tribune, June 18, 1989, § c at 1; *Noise Not That Big an Issue*, AIRPORT REP., Oct. 15, 1988, at 3. One report suggested that some people have "excluded noise by sound-proofing the mind." D. STARKIE & D. JOHNSON, THE ECONOMIC VALUE OF PEACE AND QUIET (1975).

49. Far from being irrational, many anti-noise groups consistently act effectively to serve their interests as they perceive them. Of course, such rational conduct may also be accompanied by considerable "passion." The combination of both passion and rational conduct in dealing with public decisionmaking can be potent. For an excellent study of this issue see F. BAILEY, THE TACTICAL USES OF PASSION: AN ESSAY ON POWER, REASON, AND REALITY (1983).

50. RICKENBACKER PORT AUTHORITY, AIRPORT MASTER PLAN AND FAR PART 150 NOISE COMPATIBILITY STUDY (1987). *See also* Jerome & Nathanson, *Socioeconomic Implications of Airport Planning*, 25 TRAFFIC Q. 267 (1971).

airport and aviation industry involvement in community affairs.[51] Of course, neighbors who fail to get the attention of those responsible for aviation activity may seek restrictions on use of the airport through legal action or political pressure.[52]

---

51. Notwithstanding the diversity of modern day life, research indicates that most people possess a high degree of pride and satisfaction in their neighborhoods. A. DOWNS, NEIGHBORHOODS AND URBAN DEVELOPMENT (1981); Fried, *The Neighborhood in Metropolitan Life: Its Psychosocial Significance*, in URBAN NEIGHBORHOODS 331 (R. Taylor ed. 1986). Because of close associations within neighborhoods, families are reluctant to leave even if the area is highly impacted by noise. Campbell, *Airport Noise: Aggravation or Acclimation*, PSYCHOLOGY TODAY, Dec. 1975, at 118 (nor do those living near noisy airports appear to avoid outdoor activities because of the noise); Greene, *Santa Ana Heights has a Problem in the Skies*, L.A. Times, Mar. 2, 1989, § 9, at 2, col. 1; Kelley, *Under the Wings, They Say a Prayer*, L.A. Times Jun. 22, 1986, § 9, at 1, col. 5 ("This is probably the second or third nicest neighborhood in Long Beach. We get along well with our neighbors, our kids' friends are here, my wife and I coach soccer and all the kids play. So we're tied up here." George Schiff, who lives at the end of the Long Beach Airport runway.).

Frankly, those who favor airport development are probably only a narrow segment of a community population, similar to project opponents who are also in the minority. The defenders of airport development may be no more legitimate spokesmen for the public interest than are opponents. Since there are seldom guidelines to resolve conflicts between these interests, it might be better if both factions begin discussions by mutually agreeing that neither minorities' claim is the more deserving. *See* Feldman, *Air Transportation Infrastructures as a Problem of Public Policy*, in CURRENT ISSUES IN TRANSPORTATION POLICY 17 (A. Altshuler ed. 1979).

52. *See generally* G. LANTNER, COMMUNITY OPPOSITION TO AIRPORT DEVELOPMENT (1972); C. LOGAN, WINNING THE LAND-USE GAME (1982); D. NELKIN, JETPORT: THE BOSTON AIRPORT CONTROVERSY (1974); M. O'HARE, L. BACOW & D. SANDERSON, FACILITY SITING AND PUBLIC OPPOSITION (1983); Lesher, *Lawmaker Accused of Interfering in Airport-Site Plans*, L.A. Times, June 30, 1989, § 2, at 3, col. 5; Newton, *Plane Facts Fuel Descent: El Monte Airport Steers Tricky Course*, L.A. Times, Oct. 1, 1989, § 9, at 1, col. 1. The strategies of anti-noise groups will vary: C. CAVANAUGH, SAVING THE GREAT SWAMP: THE PEOPLE, THE POWER BROKERS, AND AN URBAN WILDERNESS (1978) (opponents succeeded in securing federal legislation designating a proposed site for a New York area airport as a National Wildlife Refuge and Wilderness Area); Glionna, *Helicopter Limits OKD in Attempt to Quiet Skies*, L.A. Times, Sept. 28, 1989, § 2, at 1, col. 6 (discussing local government ordinance barring the use of property within certain regions as helicopter landing areas); McGarry, *Departing C—130s Leave Van Nuys Guard Base Future Up in the Air*, L.A. Times, Dec. 8, 1988, § 9, at 6, col. 1 (foes of airport development were seeking an aerospace museum on a 62 acre site being abandoned by air guard); *Noise Sign Pays Off*, 1 AIRPORT NOISE REP. 38 (1989) (after years of trying to get departing Los Angeles International Airport traffic to delay turning south until they had passed their community, El Segundo residents erected a sign stating "UNSAFE AREA FOR JETS," intended to unnerve airline passengers. The community got an immediate response from the FAA and the airlines.); *AOPA Urges Sebastian, Fla. to Reconsider Noise Ordinance*, WEEKLY BUS. AVIATION, June 12, 1989.

Some anti-noise groups become perpetual motion machines, refusing to back off even after winning several battles over noise. Stein, *One Field a Pain*, L.A. Times, Dec. 21, 1986, § 9, at 1, col. 4 (discussing persistance of homeowners near the Torrance Airport); *Monorail Idea Must Survive Civic Myopia*, L.A. Times, Jan. 29, 1989, § 2, at 8, col. 1 (charging Newport Beach residents go too far in trying to stop a privately funded monorail).

Of course, the strategy of an anti-noise group can backfire. In 1985, Donald Trump bought an estate near the Palm Beach International Airport. In 1987, Trump formed a anti-noise political action group to back leading candidates for the County Commission, which owned the airport.

Some in the aviation community now recognize the importance of reducing the conflict between airports and neighbors. A few airports have public relations, community land use planning, or noise abatement offices to help bring local concerns into airport decision making. However, such efforts are not universal. Many airport authorities still fail to dedicate sufficient resources to work out conflicts with local property owners.[53]

Part of the problem here is that the airport operator does not have direct control over the many factors which are essential in resolving the difference between the airport and its neighbors. Local governments which regulate land use near airports and the federal government which controls airspace play indispensible roles in the resolution of such conflicts. When support and cooperation from these actors is missing, an airport sponsor may feel the likelihood of success is beyond its reach.

D. Existing Legal Remedies Do Not Encourage Air Carriers or the Federal Government to Actively Participate in Resolving Airport Noise Conflicts

Among the more troubling aspects of aviation-related noise has been the failure of the legal system to promote a resolution of conflicts among those involved with the problem. An important cause of this failure has been the limited ability of common law causes of action and remedies to address the technological, socioeconomic, and institutional complexities associated with aircraft noise. Some of these shortcomings could be overcome if legislatures would craft new causes of action and remedies.[54] However, the competition among public and private interests

---

But, Trump's endorsement became the kiss of death. Trump became the issue, and his candidates, who were initially leading in the polls, lost the election. Opposing candidates used the slogan, "Can a Billionaire Always Have His Way?" *Homeowners Threaten to Sue Over Noise*, 1 AIRPORT NOISE REP. 25 (1989).

53. Politicians who support airport development have made some incredibly insensitive statements about airport neighbors. At the opening of the Palmdale Airport facility, Los Angeles Mayor Sam Yorty said "I must warn the environmentalists that unless reason prevails and harassment ceases, the entire economy of this nation will grind to a halt. I do not feel that the silent majority of this country wants to forego a paycheck or to pay exorbitant taxes to further some of the 'far out' environmental proposals." Miles, *Yorty Dedicates Palmdale Terminal*, L.A. Times, Jun. 30, 1971, § 2, at 1, col. 3. Or, consider Congressman Gene Snyder (R-Ky) at a congressional hearing on airport noise: "The vast majority of these people that have noise pollution—that they asked for it. They bought that property close to an airport. . . . A lot of other people have other problems besides noise problems. People have marital problems. They asked for those, too. They entered into a marriage contract." *Airport and Aircraft Noise Reduction: Hearings Before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation*, 95th Cong., 1st Sess. 260 (1977).

54. *See generally* Van Alstyne, *Just Compensation of Intangible Detriment: Criteria For Legislature Modifications in California*, 16 UCLA L. REV. 491 (1969).

which might be furthered or harmed by such legislation has thwarted the likelihood of a change in the status quo.

Generally, under existing rules of law, neighbors[55] of airports may seek damages for noise injury under two causes of action: nuisance or inverse condemnation. Both of these causes of action place a heavy burden of evidentiary proof on the impacted landowner.[56] Additionally, statutes of limitation[57] have barred recovery for the vast majority of those living adjacent to airports. Consequently, many claim the aviation industry has received a windfall because it has not had to pay an important social cost of its activity.[58]

Even if the landowner could prevail in court, the amount of the likely damage award is usually far less than the cost of litigation. Consequently, lawsuits have become used more often by homeowner groups or affluent communities with a "war chest" as political leverage to flight aviation activity.[59] Such use of the legal system can frustrate judges, who recognize

---

55. Only property owners may seek recovery for noise-related injury. This leaves those who rent without a legal remedy. In Philadelphia one community leader complained that landlords were generally reluctant to insulate apartments against airport noise, even though the apartments were within a high noise zone. EPA/FAA, EFFECTS OF AIRPORT NOISE ON A NEIGHBORING STATE, app. E, at 3 (1980) (Letter from Barbara Farley, Eastwick Project Area Committee).

56. *See* Searles, *Noise as Compensable in Eminent Domain Litigation*, in REAL ESTATE VALUATION AND CONDEMNATION 31 (S. Searles ed. 1979).

In 1970 over one hundred homeowners living near the St. Paul-Minneapolis Airport sued to recover for loss of property value caused by aircraft noise. As the litigation continued from year to year without resolution, the number of plaintiffs began to decrease due to moves or death. The case was finally decided on February 1, 1989, with three homeowners remaining. A jury found that noise had *not* caused a reduction in property value, thus the airport was not liable. *Jury Finds Airport Noise Did Not Reduce Home Values*, 1 AIRPORT NOISE REP. 28 (1989).

57. Plaintiffs in law suits frequently have difficulty accepting the dismissal of their claims because of a statute of limitations bar. When a judge barred her suit against the Burbank Airport because of a statute of limitations, homeowner Yolanda McGinnis complained, "It's really a crock. It's really unfair. I don't know what my options are or what the lawyers are going to do. But big business talks. Who really gives a damn about the people?" Braxton, *Angry Plaintiffs Fume over Ban on Airport Noise Damage Suits*, L.A. Times, Sep. 16, 1988, § 2, at 8, col. 1. For the philosophical and practical reasons for statutes of limitations *see* Epstein, *The Temporal Dimension in Tort Law*, 53 U. CHI. L. REV. 1175 (1986).

58. *E.g.*, Doganis & Thompson, *Establishing Airport Cost and Revenue Functions*, 78 AERONAUTICAL J. 285, 303-04 (1974). Interestingly, New York City citizens have often paid large fines for the noise they create in urban areas. *See* Note, *Urban Noise Control*, 4 COLUM. J.L. & SOC. PROBS. 105, 108-11 (1968).

59. Coulson, *Nearly 700 Claims Filed; Homeowners Plan to Sue Port over Airport Noise*, L.A. Times, July 1, 1986, § 2, at 1, col. 1; Murphy, *Airport Noise Foes Display Clout with Pact Limiting Jets*, L.A. Times, Nov. 11, 1985, § 1, at 3, col. 4; Szymczak, *O'Hare Suburbs Under Fire*, Chicago Tribune, June 18, 1989, news, at 1; *Airport Noise Spurs Suit by Loma Portal Residents*, L.A. Times, July 31, 1986, § 2, at 2, col. 4; *Keeping Quiet at HPN; Noise Reduction at Westchester County Airport*; BUS. & COM. AVIATION, June 1988, at 48; *Austin Group Preparing Test Lawsuit Over Noise*, 1 AIRPORT NOISE REP. 76 (1989).

the real battleground is within the legislative arena.[60]

Additionally, the United States Supreme Court held that only the airport proprietor will be liable for noise-related injury.[61] Two authors have made the following astute observation about this situation:

> The *liability* for aviation noise has been partially disconnected from the *responsibility* for aviation noise abatement. This is a result of decisions in which various courts have held that the liability for aviation noise damages rests solely on the hundreds of individual airport proprietors, while responsibility for aviation noise abatement resides collectively among federal, state and local governments, air carrier and airport proprietors. This "single liability/shared responsibility" situation promotes, rather than discourages, confusion. The result is unwarranted agony for all the parties.[62]

Beyond these problems are some conditions or characteristics of noise litigation which limit a fair resolution of controversies.[63] Included among these are the following:

- differences between judges, some of whom focus on the nature of the aviation activity, while others look at the consequences to the property owner;
- the problem of finding the airport authority liable in cases where the airport is in compliance with all regulatory requirements;
- uncertainty about the nature of the "property interest"[64] damaged by the aviation activity;

---

60. *See* comments of judge in *Ft. Lauderdale International Airport: Judge Denies Request for Injunctive Relief*, 1 AIRPORT NOISE REP. 93 (1989). *But see Judge Gives City 20 Days to Enact Strict Noise Rules*, 1 AIRPORT NOISE REP. 159 (1989) (where judge took matter out of the hands of local elected officials who were attempting to negotiate a compromise).

61. Griggs v. Allegheny County, 369 U.S. 84 (1962).

62. Werlich & Krinsky, *The Aviation Noise Abatement Controversy: Magnificient Laws, Noisy Machines, and the Legal Liability Shuffle*, 15 LOY. L.A.L. REV. 69 (1981). The Environmental Protection Agency concluded that the sole liability rule "induced strains among institutions which must cooperate if the aircraft/airport noise problem is to be adequately addressed." LEGAL AND INSTITUTIONAL ANALYSIS OF AIRCRAFT AND AIRPORT NOISE AND APPORTIONMENT OF AUTHORITY BETWEEN FEDERAL, STATE, AND LOCAL GOVERNMENTS, ch. 5, at 30 (1973).

63. Social conflict issues are difficult to resolve in the courts. S. SATO & A. VAN ALSTYNE, STATE AND LOCAL GOVERNMENT LAW 772-84, 849-85 (1977); Calabresi & Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972); Latin, *Problem-Solving Behavior and Theories of Tort Liability*, 73 CALIF. L. REV. 677 (1985); Sugarman, *Doing Away with Tort Law*, 73 CALIF. L. REV. 558 (1985).

64. Property is a complicated legal concept. It is not an object that can be owned or possessed, but rather the rights a person has with respect to material objects. Such rights may be several and are represented as a "bundle of rights." In having such property rights, however, the law recognizes the state can reserve certain rights to itself. R. BARLOWE, LAND RESOURCE ECONOMICS: THE ECONOMICS OF REAL ESTATE 328-61 (4th ed. 1986). The disagreement occurs when landowner and state adopt different perceptions about their rights in property. For the landowner, property rights likely include the need for "individual distance," the security in the use and possession of property, and the ability to associate with others on the property. T. BENDITT, RIGHTS (1982). Many Americans now believe they have a right to declare their neighborhoods off-limits to unwanted economic and social change. H. BOYTE, THE BACK-YARD

- efforts to set the amount of compensation[65] raises questions about the appropriate date and basis for valuation;
- airports have strong economic and political reasons to fight claims of noise injury, no matter how meritorious;
- the common law liability system creates incentives for victims to exaggerate the claim of injury;
- litigation benefits lawyers to a degree disproportionate to their contribution to solving the problem; and
- there is no guarantee that the compensation awarded will be used by the landowner to help ameliorate the problem.

Clearly, present conditions impair rather than enhance the ability to finally resolve disputes between an airport and its neighbors. Perhaps of equal concern is the fact that the law may discourage airport proprietors from carrying out thoughtful planning and coordination for the growth of the airport. Given the risk of sole liability, many airport managers closely guard any information about future airport operations. This has a chilling effect on public discussion and undermines appropriate government accountability.

Additionally, the fact the airport proprietor is solely liable for noise-related injuries limits the concern demonstrated by the airlines, other local governments, the states, and the federal government. Typically, the airport is left alone in seeking ways to mitigate noise impacts, negotiate with or educate local landowners, or pay for the increased costs associated with the spillover effects of aviation activity.

E. Competing Community Concerns and Lack of Experience in Land Use Planning Create Serious Problems for Airport Infrastructure Management

1. Locally Owned and Operated Airports in the United States are Immersed in Community and Regional Complexities and Rivalries

Airport operation, planning, and development suffer from competing priorities and fragmentation of government authority in urban and rural[66]

REVOLUTION: UNDERSTANDING THE NEW CITIZEN MOVEMENT (1980); M. CASTELLS, THE CITY AND THE GRASSROOTS: A CROSS-CULTURAL THEORY OF URBAN SOCIAL MOVEMENTS (1983).

For a discussion of the "artificial" definition of property in airport noise cases see Patterson, *The Airport Noise Cases: Condemnation by Nuisance and Beyond*, 7 WAKE FOREST L. REV. 271 (1971).

65. *See* Ingber, *Rethinking Intangible Injuries: A Focus on Remedy*, 73 CALIF. L. REV. 772 (1985); Ingram, *The Effect on Value of Noise Factors*, in REAL ESTATE VALUATION AND CONDEMNATION 47 (S. Searles ed. 1979).

66. Expansion of airports into rural areas must confront dwindling resources and changing priorities. Many watch with concern the loss of prime agricultural land and loss of forest, wetlands and wildlife conservation areas. Also, the introduction of a transportation activity into a rural community can significantly affect the community cohesiveness and structure. Alig & Healy,

America. While most airports are owned by one unit of local government, aviation impacts are almost universally felt across several local jurisdictional boundaries.[67] Since these boundaries represent historic differences between neighborhoods and communities, it is not surprising that units of local government will disagree about the use of an airport.[68]

Decision making within local governments is heavily influenced by special local concerns.[69] Such specific interests are able to control local government decisions for at least two reasons: units of local government typically lack the electoral diversity which exists in large populations or extensive land areas; and they often lack the checks and balances, such as bicameral legislatures and separation of powers, found at the state and national level.

Added to this backdrop is the condition that control of land use continues to be the prerogative of local governments. In fact, in an era when cities, towns, counties, and so forth have experienced an erosion of many

---

Urban and Built-Up Land Area Changes in the United States: An Empirical Investigation of Determinants, 63 LAND ECON. 215 (1987); Wilkening & Klessig, *The Rural Environment: Quality and Conflicts in Land Use*, in RURAL U.S.A. PERSISTENCE AND CHANGE 19 (T. Ford ed. 1978).

A prominent legislative leader in aviation issues stated: "I am not sure we are going to force all the noisy planes into rural America, because they are not going to stand for it, either." *Government Policies on Aircraft Noise, Hearings Before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation*, 99th Cong., 2d Sess. 50 (1986) (Congressman Glenn M. Anderson).

67. Indianapolis International Airport is surrounded by three local governments: Marion County, Hendricks County, and the City of Plainfield. FAA, RECORD OF APPROVAL, INDIANAPOLIS INTERNATIONAL AIRPORT NOISE COMPATIBILITY PROGRAM, Sept. 14, 1988, at 5. The New Orleans International Airport is bordered by Jefferson Parish, St. Charles Parish, and the City of Kenner. FAA, RECORD OF APPROVAL, NEW ORLEANS INTERNATIONAL AIRPORT NOISE COMPATIBILITY PROGRAM, Aug. 17, 1988.

68. For a discussion of local land use conflict see R. BARLOWE, *supra* note 64 (4th ed. 1986); H. BOSCHKEN, LAND USE CONFLICTS: ORGANIZATIONAL DESIGN AND RESOURCE MANAGEMENT (1982); R. MUIR & R. PADDISON, POLITICS, GEOGRAPHY AND BEHAVIOR (1981); Delaney, *Robert Hotaling: Planner Discusses Yesterday's Errors, Today's Challenges*, OAKLAND BUS., Mar. 1989, § 1, at 28; Vogel & Swanson, *The Growth Machine Versus the Antigrowth Coalition: The Battle for our Communities*, 25 URB. AFF. Q. 63 (1989); Wyma, *The NIMBY Factor*, L.A. Times, Jan. 5, 1989, § 5, at 10, col. 2. One historian suggests that the catalysts of conflict between local governments are: real estate development schemes; news media reporting; transportation infrastructure planning. J. SCHELLENBERG, CONFLICT BETWEEN COMMUNITIES: AMERICAN COUNTY SEAT WARS (1987). *See also* S. ELKIN, CITY AND REGIME IN THE AMERICAN REPUBLIC (1987); P. PETERSON, CITY LIMITS (1981); W. SCHULTZE, URBAN POLITICS (1985); Herbers, *17th-Century Counties Struggle to Cope with 20th-Century Problems*, GOVERNING, May 1989, at 42.

69. Pressures by interest groups are seldom proportional to the total benefits each group would gain from alternative social choices. Thus, the distribution of political power among interest groups may differ from the distribution of total costs.

One of the more influential interest groups can be the center-city business community who prefer close-in infrastructure support. S. PLOTKIN, KEEP OUT: THE STRUGGLE FOR LAND USE CONTROL 36 (1987).

other governmental powers,[70] the right of local land use control is more jealously guarded than ever before.

A serious consequence of this situation has been the construction of incompatible residential development within close proximity to airports. Weekly, if not daily, landowners desirous of building homes near an airport seek the necessary land use approvals from a local government. If that government does not own the airport or have a strong commitment to the long-range needs of aviation, the developer's proposal will likely be approved.[71] Reasons why incompatible development might be approved include the following:

- the parcel may not be suitably sized to allow for more compatible commercial or industrial development;
- the property may be in an already well-developed residential area having little commercial/industrial potential;
- the general perception that the airport, as a proprietary activity, ought to compensate land owners for restrictions on uses of property;
- failure to approve the project could mean the loss of tax revenue; and
- failure to construct homes might aggravate a community housing shortage.

As a result many airports in the United States have become "bulls eye"[72] facilities, with little or no buffer between the airport and residential communities.[73]

---

70. Local governments complain of lost local control because of:
- disharmony among state and federal agencies and branches of government;
- increased resources needed to continually battle cross-jurisdictional issues;
- increased concern over vulnerability to litigation; and
- external policy decisions which have a significant effect on local economics and financing.

Walker, *Intergovernmental Relations and the Well-Governed City: Cooperation, Confrontation, Clarification*, 75 NAT'L CIVIC REV. 65, 85-86 (1986) (claiming that local governments are responding either with aparthy or hostility to such matters).

For an excellent discussion of how an elected official of a noise impacted community views airport issues see *Reauthorization of the Airport and Airway Trust Fund and Related Issues: Hearings Before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation*, 100th Cong., 1st Sess. 602-11 (1987) (testimony of T. Michael McDowell, City Manager of the City of College Park, Georgia).

71. Frequently, local governments approve incompatible development in the face of strong, diverse opposition from airport supporters. The City of Alameda approved a 908 acre residential project (on Bay Farm Island) near the Oakland Airport, in spite of strong opposition from the airport proprietor, the regional association of governments, and the state-sponsored airport land use commission. Blitch, *Airport Noise and Intergovernmental Conflict: A Case Study in Land Use Parochialism*, 5 ECOLOGY L.Q. 669 (1976). *See also* Adams & Dickson, *Airport Location: Criteria and Conflict*, 31 IOWA GEOGRAPHER 3 (1973); Dawson, *Jet Noise Propels Loudoun to Question New Development*, Wash. Post, Nov. 23, 1985, § E, at 1; Sullivan, *Proposal for 73 Homes Across from Oxnard Airport Backed*, L.A. Times, Jan. 19, 1989, § 9, at 3, col. 2.

72. This phrase was used by Long Beach City Councilman Tom Clark to describe Long Beach Airport. *Long Beach Airport*, L.A. Times, Jan. 31, 1989, Editorial, § 2, at 6, col. 6.

73. Encroachment around an airport typically occurs gradually, one decision at a time. Some have called similar policy choices a "tyranny of small decisions." *Cf.* Kahn, *The Tyranny*

Another consequence of fragmented local decision making is the opposition by one or more local governments to the airport development plans of another. The opposing government may have its own airport, which it desires to shield from competition,[74] or it may want to curb the spillover effects which accompany increased aviation activity.[75] This competitive atmosphere has become so fierce that the construction of new airports or airport expansion projects are a rarity in the United States.[76]

---

of Small Decisions: Market Failures, Imperfections, and the Limits of Economics, 19 KYKLOS: INTERNATIONAL REVIEW FOR SOCIAL SCIENCE 23 (1966).

74. During the 1960s New York and New Jersey were actively considering building a fourth airport in the New York City area. When the State of Connecticut offered to build an airport to compete with the New York area airports, the Port Authority of New York and New Jersey orchestrated opposition to eliminate the Connecticut proposal. Berger, *Nobody Loves an Airport*, 43 S. CAL. L. REV. 631, 694-96 (1970).

75. A good example of local conflict over airport operations involves the Burbank Airport, owned and operated by the cities of Burbank, Glendale, and Pasadena. These three cities are east of the airport, while the City of Los Angeles lies to the west. For years all planes leaving Burbank Airport have flown departure routes placing them over residential areas in the City of Los Angeles. Los Angeles politicians routinely complain and take every opportunity to challenge the flight path. The City of Los Angeles has urged a "fair share" plan, where planes would fly an equal number of flights to the east and to the west. The three cities respond they are powerless to make a change. Flights to the east require sharp banking maneuvers to avoid the Verdugo Mountains. The three cities claim the issue is one of safety and the FAA has exclusive authority over flight corridors. The airport authority also points out that 55% of the airport employment goes to Los Angeles residents, with only 23.5% to residents of the three cities. Finally, they claim that implementing a fair share plan would simply increase the number of people within noise impacted areas, and increase rather than eliminate public protest. As a counter, the City of Los Angeles Council voted unanimously to zone a small portion of the airport which lies within the City of Los Angeles so the airport could not build a proposed new terminal. McGarry, *Burbank Airport Rejects Demand to Share Noise*, L.A. Times, Mar. 10, 1988, § 9, at 1, col. 1; Simon, *L.A. Council Uses Zoning in Noise War with Airport*, L.A. Times, Jan. 14, 1988, § 2, at 8, col. 4.

One way to control an airport is for the local government opposed to further development to purchase the airport. Bailey, *Desire to Control Growth, Noise Sparks Move, Carlsbad Weighs Plan to Buy Palomar Airport*, L.A. Times, Dec. 23, 1987, § 2, at 1, col. 1.

Of course, some communities may be able to capitalize on airport growth by promoting compatible development and increasing their tax base. MacDougall, *Manor Readies for Airport and Betting by Devising Plan to Deal with Growth*, AUSTIN BUS. J., May 22, 1989, § 1, at 9; Whitmore, *Suburban Mayors at Odds on Noise, Expansion Issues*, CRAIN'S CHICAGO BUS., July 11, 1988, at T6.

76. An example of a snarled airport project was the St. Louis proposal. A site was selected for a new airport across the Mississippi River in Illinois. Initially, the Illinois State Government, the City of St. Louis, and the FAA agreed. Opposing the project were residents of the county where the new airport would be located (noise), the State of Missouri (didn't want airport in Illinois), and business interests in St. Louis (which didn't want to lose the close-in location of Lambert Field). Finally, a change in the St. Louis city government caused the demise of the project. OFFICE OF TECHNOLOGY ASSESSMENT, AIRPORT AND AIR TRAFFIC CONTROL SYSTEM 115 (1982).

The last major airport built in the United States, the Dallas-Fort Worth Airport, occurred after 30 years of local bickering. The construction of the airport was fought by both Dallas and Fort Worth. The following factors kept the two cities apart: each city had a different congressman who supported federal funding for an airport owned by one city; refusal of the Civil Aeronautics

What is needed is the intervention of a higher level of government to orchestrate a successful resolution of these local interjurisdictional conflicts. But the states and federal government have refused to assume such a role because the problem is perceived as "land use," which is an almost sacrosanct local prerogative.

2. *Lack of Experience in Airport Planning and Community Land Use Control Impairs an Airport's Ability to Meet Long Range Needs*

Airports themselves must take some of the responsibility for the intergovernmental friction caused by aviation activity. Airports differ widely in the staff size, experience, and training needed to tackle complex land use planning and community conflict issues.[77] More often than not, airport administrators are unaware of community planning and zoning actions which can affect airport operations. Even if airport officials learn of potentially conflicting local government actions, the response is not always timely or well orchestrated to influence community decision making.[78]

Board to interfere in a "local matter"; continuous squabbling between the two cities over the location and design of a jointly-owned airport; unsupported confidence in the expansion potential of the existing airport (Love Field); opposition by Dallas business leaders and Dallas media to a jointly owned airport; failure of the air carriers to support a move to another airport. Finally, the following events brought the parties together: the small community of Arlington, Texas sought to sponsor a regional airport in competition with the two urban centers; the airlines agreed to consolidate resources at one airport; legal action by the City of Dallas against CAB's support of a Fort Worth-sponsored airport; eventual uniform, strong participation by CAB and FAA; the federal government refused to fund airport expansion plans at Love Field because of limited expansion potential; homeowners attacked the City of Dallas because of increased noise levels near Love Field; airline pilots declared Love Field unsafe; leadership skills of Dallas Mayor Erik Jonsson; pressure from the State of Texas for a single, jointly-owned airport. G. BURLAGE, FEDERALISM'S EXPANDING DIMENSIONS: A CASE STUDY OF DECISION-MAKING OF THE DALLAS-FORT WORTH REGIONAL AIRPORT (1969).

77. Only about 700 airports in the United States require the services of a full-time airport manager. J. WILEY, *supra* note 31, at 23. For some airports, mismanagement is a major problem, limiting airport services and capacity. Bremer, *Airports' Troubles Raise Questions of Mismanagement*, AIRPORT SERVICES, Oct. 1988, at 23. After deregulation smaller airports found it difficult to compete. Among the reasons for small airport troubles: absence of community support; lack of effective airport manager and staff; and absence of a long-range plan for airport development consistent with community goals and objectives. Bienvenu, *Staying Alive: How Small Airports Can Meet the Challenge*, AIRPORT SERVICES, May 1985, at 42.

78. In 1987 developer Donald Epler petitioned for property rezoning with the Columbus Development Commission. Epler wanted to build a 300-home subdivision on 180 acres of land within the airport high noise area. A month before the scheduled hearing, airport coordinator Bernie Meleski sent a memorandum to the city planning office suggesting disapproval of the petition, or conditional approval requiring sound-proofing of structures and dedication of aviation easements. On the date of the hearing, no airport representative was present, nor was the memo noted or discussed. By a six-to-one vote the rezoning was approved with no restrictions. Subsequently, when the airport complained of the action, the Commission replied:

- the Epler tract was on the "fringe" of the noise area;

Similar shortcomings have a profound influence on an airport's ability to prepare and promote airport master plans[79] and land use compatibility proposals, which are necessary for long term efficiency. Among the common weaknesses[80] in airport planning, which frustrate local residents and community leaders, are the following:

- the focus is on commercial aviation interests, often ignoring broader community priorities and concerns;
- citizens are not involved during all phases of planning, causing important local issues to be overlooked, or understated;
- planning often emphasizes physical solutions, without addressing possible changes in operations or institutional relationships;[81]
- airports have been "secretive" in conducting planning, because of the perceived need to avoid private land speculation, limit the potential for litigation, and "maintain operational flexibility;"[82]
- planners often disclaim any serious environmental or socioeconomic im-

---

- the noise problem will likely "fade" as airlines use quieter aircraft;
- the airport's determinations of noise impacts was an "educated guess" intended to be "flexible and fluid;"
- imposition of noise easements would be a taking of property rights requiring compensation to the landowner; and
- the Commission will pay more attention in the future to concerns of the airport.

Wagman, *Officials Debate Noise Levels for New Subdivision*, 4 BUS. FIRST-COLUMBUS 9 (1987).

79. The issues to be addressed in airport planning have not changed much in twenty years. They include: resolution of airspace conflicts, how to reduce noise to acceptable levels, location of airport infrastructure, role of reliever airports, resolution of ground access problems, how to accommodate military training/facilities, services for air cargo, the appropriate government entity to sponsor development, and financing options to fund development. R. SHINN, REGIONAL AIRPORT PLANNING: A SYSTEMATIC MODEL 79-80 (1969).

80. Berryhill, *Memphis Restructures Management to Keep Pace with Growth*, AIRPORT SERVICES, Oct. 1989, at 29; Morris, *The Initiation, Assessment, Securing, and Accomplishment of Major Projects*, 7 TECH. IN SOC'Y 31 (1985); Rohe & Gates, *Neighborhood Planning in America* in URBAN NEIGHBORHOODS 5 (R. Taylor ed. 1986). Airports often have competing missions which make planning difficult. 133 CONG. REC. H11696 (daily ed. Dec. 18, 1987) (Congressman Hughes discussing the Atlantic City Airport).

Airport infrastructure strategies can be dominated by four professions, each having a narrow view of the issues: engineers (people will obviously accept this professional, complete, fair analysis and cooperate with the project); planners (the way to deal with opposition is by increasing public participation so that government agencies know how local residents feel about things); lawyers (the way to deal with opponents is to beat them in court, or prove that you can); and economists (if people are upset about the impacts, just offer them enough money and they will be satisfied).

81. The literature in support of airport administration is rich in design and construction information. Comparatively little is available on airport economic, political, environmental, and community relations problems. J. WILEY, AIRPORT ADMINISTRATIONS AND MANAGEMENT 1 (1986).

82. FAA, Record of Decision, Anchorage International Airport Noise Compatibility Program 3-5 (Oct. 10, 1988) (difficult for City of Anchorage to implement airport recommendations requiring city action when the city was not consulted during the planning process); E. FELDMAN & J. MILCH, THE POLITICS OF CANADIAN AIRPORT DEVELOPMENT: LESSONS in FEDERALISM 50-53 (1983); Pavlicek, *O'Hare International Airport: Impervious to Proposed State Efforts to Limit Airport Noise*, 47 J. AIR L. & COM. 413, 443-44 (1982); Searles, *Engle on Teterboro Airport*, BUS. & COM. AVIATION, Feb. 1986, at 90.

pacts, even though they claim dramatic increases in future aviation activity;[83]

- often there is lack of leadership in the preparation of a plan, and in the plan's advocacy;[84] and
- forecasts of future aviation activity are often exaggerated, undermining subsequent community confidence in a plan.[85]

Such planning flaws can be further magnified by external forces which may derail the success of even well-prepared airport objectives. Two of the most important external factors are:

- the failure of the budget process to fund planning initiatives, thus eroding the comprehensive nature of a plan;[86] and
- the tendency of different local governments or government agencies to publish conflicting plans affecting the same area of influence.[87]

Airports can expect that those with interests which conflict with the airport will use these weaknesses to curtail airport development. Specifically, landowners with sizeable economic interests at stake will challenge a plan's supporting data and conclusions,[88] and seek relief through the

---

83. Local communities were stunned when the Port Authority of New York and New Jersey published its $2.7 million expansion plan (Project 2000) for Kennedy Airport. The study found no increase in aircraft noise inspite of a forecasted 50% increase in traffic. Monahan, *Airport Study Raises Fears*, N.Y. Times, Nov. 15, 1987, 11L1, at 8, col. 4.

84. Among the common leadership failings is the notorious mishandling of the news media. Shaw, *Don't Screw Up on a Slow News Day*, 14 CURRENT MUN. PROBS. 393 (1988).

85. Because forecasting relies a lot on judgment, there is the risk that political influence may affect the results. One study found that local airport master plan forecasts were greatly exaggerated forty percent of the time. Also, when airport forecasts were totaled the sum of aviation activity was 2.5 to 3 times higher than the state aviation forecast. J. RODWELL, THE STATES AVIATION FORECASTING NEEDS 27-28 (FAA-AVP-79-7 (1979)).

86. *See* Walters, *Airports: An Economic Survey*, 12 J. TRANSPORT ECON. & POL'Y 125-26 (1978) (good bibliography of references on airport topics prior to 1977). A continuing problem at the local level is the compartmentalization of land use planning and fiscal responsibilities. Closer ties need to be developed. Chapman, *Land Use Planning and the Local Budget: A Model of Their Interrelationships*, 48 PUB. ADMIN. REV. 800 (1988).

An airport cannot expect much local support if it is poorly managed so that it is a tax burden. Airports increase the chances for community support if they are run in the black. Jones, *Community Involvement in Airport Planning and Development*, TENTH ANN. AIRPORT CONF. (1987).

87. The history of Southern California airport planning is the almost annual publication of a "new" airport study sponsored by a different government entity. And, this has been going on for decades. *E.g.*, R. SHINN, REGIONAL AIRPORT PLANNING: A SYSTEMATIC MODEL 49-63 (1969); Philmus, *Los Angeles Hatches Big Area Airport Plan*, AIR TRANSPORT WORLD, Aug. 1965, at 23.

An example of successive, conflicting plans for the same airport occurred between 1983 and 1987 at the Rickenbacker Airport (Columbus, Ohio). In 1983 the local government sponsor of the civil operations at the airport prepared a "noise reduction plan." In 1985, the Air Force prepared a noise study and "community agreement" to reduce noise, as part of the transfer of property to the local government. Within 18 months the FAA funded a FAR part 150 Noise-Compatibility Study. There was no continuity among those preparing the three studies. As a result there were multiple inconsistencies. RICKENBACKER AIRPORT AUTHORITY, AIRPORT MASTER PLAN AND FAR PART 150 NOISE COMPATIBILITY STUDY: NOISE COMPATIBILITY PLAN 3 (1987).

88. Depending on the economic stakes involved, land developers may do separate noise

political process. Another common response is for elected officials, wanting to avoid the consequences of choosing between competing interests, to require "further study" of the problem and alternatives.[89]

Pointing out the pitfalls of airport and community planning does not mean that airport projects are doomed from the start. A few airports have succeeded in preparing credible plans and coordinating aviation activities with community initiatives.[90] Such successes, however, require considerable commitment, leadership, and resources by the airport and its local government sponsor.[91]

F. Airports are Not Always Supported by Air Carriers in Efforts to Solve Capacity and Land Use Compatibility Problems

An airport's success is determined not only by its relationship with neighbors and local governments, but also with air carriers and others who provide important airport revenue. But the conditions under which airports and air carriers have historically conducted business are changing. Prior to deregulation the relationship between the two was relatively stable. In that era, airports and airplanes signed long-term lease agreements reflecting the regulated environment. Since deregulation the air carriers have greater latitude in selecting airports and routes to serve, and in otherwise enhancing corporate profits. Many airports, still bound by contracts negotiated prior to deregulation, are not gaining the support of the airlines in making similar adjustments to the changes.

---

studies or an economic analysis, and publish conflicting reports Britch, *Airport Noise and Intergovernmental Conflict: A Case Study in Land Use Parochialism*, 5 ECOLOGY L.Q. 669, 684-85 (1976); *Projected Employment and Development*, 15 COLO. BUS. 38 (1988); *Reno Cannon International Airport*, 1 AIRPORT NOISE REP. 67 (1989).

89. This strategy backfired for politicians in Sacramento. In 1987 the airport noise issue became controversial when flights departing the Metropolitan Airport were rerouted to fly over the Central City. They had previously flown over the suburb of Natomab. The County Supervisors delayed making a decision and formed a 27-member citizen task group, expecting the group would retain the route over the city. When the committee recommended a routing over the suburbs, the committee was immediately disbanded and its recommendations rejected. *County Supervisors Disband 27-Member Noise Task Force*, 1 AIRPORT NOISE REP. 66 (1989).

90. One of the best airport community relations programs is run by the Port of Seattle for the Seattle-Tacoma International Airport (Sea-Tac). Hallmarks of that program include: a monthly newsletter to 35,000 citizens; an open-to-the-public policy on all meetings and work sessions; an environmental mediation program involving the FAA, air carriers, airline pilots, airport users, and the community; an aggressive public education program using local newspapers, primary/secondary school programs, small group meetings, and airport tours; and a full-time professional real estate staff. *See* SEA-TAC FORUM; SOUND INFORMATION (serial publications of the Port of Seattle 1988 & 1989).

91. The private sector has just as difficult a problem with constantly changing company policies, which cause havoc in facility planning. Ouye, *The Effect of Policy on Facility Planning*, 30 SITE INDUS. SELECTION HANDBOOK 337 (1985).

Among the matters, since deregulation, where airports could use increased participation from the air carriers are: willingness of air carriers to adjust schedules to reduce airport congestion and delay; and assistance in working out solutions to community conflicts.[92] When local pressure has forced airports to impose use restrictions airlines quickly point out the airport's obligations under the existing lease, the needs of interstate commerce, and the erosion of safety margins.

Notwithstanding air carrier objections, an airport may ultimately prevail in imposing restrictions if the airport serves a market important to the carrier.[93] While such market advantages have helped some airports, there is still an overall absence of regular coordination between airports and air carriers. The most publicized example of such disharmony has been the refusal of major airlines to support airport expansion projects, which might make room for competition from other air carriers.[94]

While there is seldom a clear right or wrong answer to these airport/air carrier issues, the present distant relationship means alternatives are seldom discussed or considered. As a result both communities and the nation's air transportation system suffer the consequences.

G. Even if an Airport is Committed to Limiting Aircraft Noise Impacts, Selecting and Implementing Noise Abatement Actions Requires Careful Planning, a Public Will for Such Actions, and Leadership

Finding ways to limit the effects of aircraft noise remains among an

---

92. Of course, at the center of this conflict is the noise generated by jet aircraft, many operated by air carriers. Several factors reduce the air carriers' interest in finding necessary solutions concerning noise impacts.

- Airlines and pilots have a strong interest in avoiding loss of life and the liability associated with unsafe aircraft operations. If noise abatement actions, either collectively or specifically, are perceived as eroding safety, the airlines will resist.
- Landowners near airports are not directly the "customer" of the airlines. Consequently, they are not able to influence market decisions.
- To date, homeowners have not had the political support sufficient to embarrass or challenge aviation industry decisions relating to noise abatement.
- There are no "moral inhibitions" against air carriers operating noisy aircraft, since aviation activities are viewed as benefiting the public.
- The airports, not the air carriers, are liable for noise injuries.

93. Examples of this include Lindbergh Field (San Diego) and John Wayne Airport (Orange County, California). O'Dell, *Battle for John Wayne's Golden Slots*, L.A. Times, Mar. 5, 1989, § 4, at 1, col. 2.

94. *See* Feldman, *Path to Additional Airport Capacity has Many Potholes*, 25 AIR TRANSPORT WORLD 18 (1988) (discussing US Air's delay in supporting expansion plans for Pittsburgh Airport). Of course, commitment to a major airport expansion is an important investment decision for an airline. Such decisions must compete with other decisions involving new aircraft acquisitions, maintenance facilities, and other capital needs.

airport proprietor's more vexing challenges.[95] In response to continuing pressure airports have considered many "noise abatement actions"[96] which can reduce noise levels for residential dwellers or shift noise impacts. A comprehensive noise abatement program usually requires cooperation among several local jurisdictions and government agencies,[97] and routine attention[98] to the problem after abatement actions are initiated. Such intergovernmental cooperation and careful attention to the problem are not common. Also, as illustrated below, other institutional and policy concerns can scuttle otherwise well-intended noise control measures.[99]

---

95. *See generally* GENERAL ACCOUNTING OFFICE, AIRCRAFT NOISE: EIGHT AIRPORTS' EFFORTS TO MITIGATE NOISE (RCED-89-189 (1989)).

96. Among the many noise abatement actions are: changes in runway location, length, or strength to shift operations away from populated areas; displaced runway thresholds; preferential or rotational runway use programs; preferential flight track use; restricted time/location of engine maintenance runups; limits on numbers/types of certain operations; limits on types of aircraft; curfews; increased glideslope angle; power and flap management; acquisition of land or easements; compatible use zoning; building code provisions; sound insulation of existing buildings; real property noise notices to prospective buyers; purchase assurance guarantees; noise-related landing fees; build high-speed exit taxiways; construct noise barriers; establish noise abatement office at airport; promote redevelopment programs; initiate tax incentives for compatible land uses. A. HARRIS, R. MILLER & J. MAHONY, A GUIDANCE DOCUMENT ON AIRPORT NOISE CONTROL (FAA Report No. FAA-EE-80-37 (1980)). The effectiveness of such measures is determined by the reduction of people living within high noise areas, and the reduction of the number of sensitive sites (schools, churches, hospitals, parkland) impacted. *Id.*, ch. 2, at 6.

The *cost* of implementing the many noise abatement actions is often perceived by airports owners and operators as a "bottomless pit." *Reauthorization of the Airport and Airway Trust Fund and Related Issues, Hearings Before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation*, 100th Cong., 1st Sess. 233 (1987) (testimony of J. Donald Reilly, Airport Operators Council International).

97. Typically noise abatement strategies include several actions which must be implemented by local governments which are not sponsors of the airport. *See* METROPOLITAN WASHINGTON AIRPORTS, FAR 150 NOISE COMPATIBILITY PROGRAM WASHINGTON DULLES INTERNATIONAL AIRPORT (Jan. 1985) (report recommended 19 noise abatement actions, ten of which to be implemented by local governments).

98. It is a major task to ensure noise control on a day-to-day basis. Included among the regular decisions which have noise impact consequences are: control of air traffic in the terminal area; issuance of building permits; approval of utility extensions and street improvements; subdivision approvals; location decisions for public facilities; airline and airport capital investment decisions.

99. Not all noise abatement actions are warmly accepted by local residents. At Los Angeles International Airport a 15,000-foot-long sound barrier wall was constructed to reduce noise transmissions. Five families which benefited from the sound barrier sued the airport contending the wall was an eyesore that depreciated their property values. Hager, *High Court Upholds Right to Sue Over Airport Jet Noise*, L.A. Times, Feb. 25, 1986, § 2, at 1, col. 4.

1. *Political, Fiscal, and Other Constraints Limit an Airport's Ability to Purchase Property in Areas of High Noise Impact*

From time to time coordinated airport planning may lead to the purchase of noise-impacted homes, relocation of families within the community, and redevelopment of the property with more compatible uses.[100] But the local public may prevent such actions if large numbers of families have to be relocated.[101] Other factors which curtail the acquisition of noise-impacted property include:

- removal of property from local government tax rolls is seldom well received;
- during fiscally-constrained times the high cost of land acquisition may not compete well with other public projects;
- strong real estate investors typically object to public bodies entering the land acquisition and development market;
- proposed redevelopment actions for acquired land can conflict with existing community comprehensive planning; and
- additional resources necessary to manage the real estate and relocation effort may burden limited airport administrative capability.[102]

Studies of families facing relocation suggest that people have greater social and psychological problems with moving, than financial concerns.[103] People can also harbor suspicions against outsiders who propose "rehabilitation" plans for their neighborhoods.[104]

---

100. *See* Waters, *Airport Panel Approves Development Blueprint for Property Near LAX*, L.A. Times, Apr. 27, 1989, § 2, at 8, col. 1; Waters, *Airport Funds Will Aid Relocation of Residents Affected by Jet Noise*, L.A. Times, May 28, 1987, § 9, at 1, col. 1; *Southern Atlanta Will Rise for the First Time*, ENGINEERING NEWS-REC., Nov. 3, 1988, at 5 (discussing land purchase and redevelopment project by Atlanta's Hartsfield Airport).

101. Rockett, *Airport Noise: Did the Airport Safety and Noise Abatement Act of 1979 Solve the Problem?*, 52 J. AIR L. & COM. 499, 519 (1986).

102. *Compare* Christensen & Jackson, *Problems of Relocation in a Major City: Activities and Achievements in Baltimore, Maryland*, 277 HIGHWAY RESEARCH REC. 1 (1969) *with* E. FELDMAN & J. MILCH, THE POLITICS OF CANADIAN AIRPORT DEVELOPMENT: LESSONS FOR FEDERALISM 61-67 (1983) (discussing mismanaged condemnation and relocation efforts associated with establishment of Mirabel-Montreal Airport).

103. U.S. ADVISORY COMM'N ON INTERGOVERNMENTAL RELATIONS, RELOCATION: UNEQUAL TREATMENT OF PEOPLE AND BUSINESSES DISPLACED BY GOVERNMENT (1965); Rubenstein, *Relocation of Families for Public Improvement Projects*, 54, J. AM. PLAN. A. 185 (1988); Note, *The Interest in Rootedness: Family Relocation and an Approach to Full Indemnity*, 21 STAN. L. REV. 801, 813-18 (1969).

104. A working-class, largely Latino immigrant community (Lennox in Los Angeles County) of 20,000 near the Los Angeles International Airport was studied for possible conversion to light industrial/commercial use. The plan was developed by those living outside the community and was viewed with suspicion by residents. In order to accomplish "revitalization" the City of Hawthorne wanted to annex Lennox. Hawthorne was challenged by the City of Inglewood, which had similar plans. Efforts to involve the Latino majority in planning was difficult, causing Anglo residents to take a disproportionate role in responding to issues of Lennox's future. Many of the

Again, the impacts of such constraints may be significantly reduced if the airport plans well, especially with the help of experienced real estate professionals.

2. *While Sound-Proofing of Homes is Becoming a Commonly Proposed Noise Abatement Strategy, It is Not Always Clear That the Costs are Justified*

When local governments won't zone out residential development near an airport, and the airport fails to implement operational changes, a common compromise is to offer to sound insulate homes.[105] In making such offers most airports seek in return an easement in the airspace above the homeowner's property. This is often troubling to land owners, who are reluctant to give up any rights in their property.[106]

The construction costs associated with sound insulation can run about $20,000 per residential structure.[107] Some have questions about the wisdom of such expense.[108] The cost of soundproofing often exceeds the original cost of the home, and many homeowners around airports have learned to live with the noise. Additionally, sound attenuation provides little relief during summer months when windows are opened and outdoor activities are common.

As in the case of relocating families from high noise areas, the airport operator may run into public opposition to the expense or process of sound attenuating homes. Of course, if the airport can neither move nor insulate residential dwellings too close to the airport it is left with the continuing bad will of its neighbors. Both the airport and its neighbors become losers for failure to take any action. For many airports the

---

residents were not citizens, could not vote, or speak English. Rotella, *County's Renewal Plan for Lennox Stirs Hopes, Fears*, L.A. Times, Feb. 24, 1989, § 2, at 8, col. 5.

105. *See* Pyle, *Van Nuys Airport: Soundproofing of Homes Urged to Fight Noise*, L.A. Times, Aug. 31, 1988, § 2, at 8, col. 4.

The common methods for acoustical treatment of structures includes: sealing or weatherstripping windows, doors, vents, and external openings; replacing hollow-core doors with solid doors; installing central air conditioning, acoustically treated ceiling panels, wall panels, and double-glazed windows; eliminating windows; and insulating entryways, attics, and crawl spaces. U.S. DEP'T OF HOUSING AND URBAN DEVELOPMENT, AIRCRAFT NOISE IMPACT: PLANNING GUIDELINES FOR LOCAL AGENCIES 112-15, 211-28 (TE/NA-472 (1972)); J. WESLER, RESIDENTIAL SOUND INSULATION: HOW TO DO IT (1987) (Wyle Laboratories Technical Note #3).

Of course, one way to soundproof would be to build structures below-ground. *School Burrows Underground to Save Space, Dodge Airplanes*, L.A. Times, Feb. 5, 1989, § 8, at 6, col. 5.

106. Waters, *Soundproof Homes Offer Joy of Silence Near Lax*, L.A. Times, May 6, 1988, § 2, at 14, col. 1.

107. D. BROWN, LOS ANGELES INTERNATIONAL AIRPORT: A CASE STUDY IN RESIDENTIAL INSULATION PROGRAMS (1985); Henderson, *Adding a Muffler to Airport Noise*, Wash. Post, July 11, 1988, at D7.

108. U.S. EPA/FAA, EFFECTS OF AIRPORT NOISE ON A NEIGHBORING STATE, Oct. 1980, app. E at 7-9 (letter from Edward J. DiPolvere, State of New Jersey Dep't of Envtl. Protection).

resolution of this dilemma is a litmus test of its planning and leadership talent.

3. *Scientific Understanding of Aircraft Noise and Its Effects Provides an Important Baseline in Resolving Disputes Between Airports and Their Neighbors*

Because of important advances in science and technology society can now travel farther and faster than ever before, but must cope with the discomfort and other effects of aviation activity. Scientists have contributed to a reduction of these affects by designing quieter aircraft engines, and developing predictive models of aircraft noise intrusion into communities. With the latter information some airports now commit considerable time and resources in determining the noise impact "contour lines" which conceptually eminent from the airport. They then try to convince local governments, air carriers, the Federal Aviation Administration, and others to adjust their planning and activities based on these science-based predictive lines.[109]

While such contour line modeling forms an important baseline for analysis of land use alternatives, there remain many facts which science has yet to quantify or clarify. Included among the limits of science in this area are: the inability to convincingly assess the risk of harm to human health; the absence of fact-based principles to assess the full social cost of aircraft noise impacts; and the failure to establish a proximate causal relationship between aviation activity and various health and welfare problems experienced by airport neighbors.[110]

Notwithstanding such problems, the airport operator's use of science-based principles can be an important stepping stone for eventual resolution of local conflicts. But, the airport's credible use of these principles requires the dedication of resources to hire or train employees competent in using science in the airport and community planning arenas.

H. *Airports Also Have Difficulties in Planning and Implementing Remedies for Airport Capacity Deficiencies*

Solving noise complaints can lead to enhancement of airport capacity.[111] Such solutions, among others, are important in an era when air-

109. *See generally* K. KRYTER, THE EFFECTS OF NOISE ON MAN (2d ed. 1985); T. SCHULTZ, COMMUNITY NOISE RATING (1982); M. SMITH, AIRCRAFT NOISE (1989).

110. W. ROSENBAUM, ENVIRONMENTAL POLITICS AND POLICY 79-104 (1985); Nelkin, *Science, Technology, and Political Conflict*, in CONTROVERSY: POLITICS OF TECHNICAL DECISIONS 9 (D. Nelkin ed. 1984); *Symposium on Law-Science Cooperation Under the National Environmental Policy Act*, 15 NAT. RESOURCES LAW. 569 (1983).

111. With homes immediately adjacent to its airport and with the potential for increased aviation traffic, the T.F. Green State Airport in Rhode Island spent $800,000 to build a noise and blast

ports serving many metropolitan regions have become chokepoints for air traffic;[112] and corporations consider a community's airport capacity in selecting locations for commercial/industrial activity.[113]

But the days of the dream fix, such as "seadromes,"[114] to airport capacity shortfalls may be past. Constraints limiting major expansion of airport capacity have become institutionalized and enjoy strong public and political support.[115] Any serious progress in increasing capacity requires able planning and a commitment to long range goals in the place of expediency.

1. *The Practice of "Banking" Land for Future Expansion Needs Has Not Been Widely Accepted in the United States*

In the last few years a small number of urban airports were able to significantly expand airport capacity largely because they owned additional developable land.[116] In some cases this property had been

---

barrier of precast concrete panels on top of a landscaped earth berm. They also imposed a curfew after 11:00 p.m. These actions cut down on the noise complaints and made it possible to seek more airline service for the area. *Rhode Island Airport Studying Expansion Needs*, AIRPORT F., Oct. 1985, at 34.

112. TRANSPORTATION RESEARCH BOARD, FUTURE DEVELOPMENT OF THE U.S. AIRPORT NETWORK 18 (1988).

113. Conway, *Time to Reconsider Fly-in Sites*, 30 INDUSTRIAL DEVELOPMENT & SITE SELECTION HANDBOOK 1162 (1985).

114. *See* S. Gomes, STATE AIRPORT SYSTEM PLANNING, ch. 4 at 23 (1976) (discussing planning for overwater airports to serve New York City, Cleveland, Chicago, Detroit, Los Angeles, Long Beach and New Orleans). In the late 1960s Southern California airport planners were considering a "seadrome" in 240 feet of water in Santa Monica Bay. The seadrome would have covered 2870 acres, with 80 to 120 gate positions. R. Shinn, REGIONAL AIRPORT PLANNING 61-62 (1969).

115. SOUTHERN CALIFORNIA ASS'N OF GOVERNMENTS, CALIFORNIA AVIATION SYSTEM STUDY: SUPPLEMENTAL TECHNICAL REPORT, June 1982, at 5.

116. After deregulation the Dayton Ohio International Airport dramatically increased its capacity. This was possible because the airport owned 364 acres available for immediate development, the field was surrounded largely by farmland, and most general aviation traffic operated out of Dayton General Airport South, a GA reliever airport owned by the City of Dayton. Scearce, *Deregulation Winner: Dayton Grows From Mid-Sized Local Airport to Big-Time Hub*, AIRPORT F., Feb. 1985, at 42. Compare Dayton with the Burbank Airport, which has little room to grow. At Burbank the passenger terminal violated FAA safety guidelines because it is too close to the runway. But plans to build another terminal away from the runway had to be scrapped because the proposed site was too close to a classified government research area used by Lockheed Corporation. The only remaining site for the terminal would displace 1,457 auto parking spaces, which were all needed by the airport. Additionally, the FAA was pressing Burbank to abandon the use of one runway because it was too short for many commercial aircraft. McGarry, *Burbank Airport Board Told Legal Issues Peril Operations*, L.A. Times, Feb. 25, 1986, § 2, at 1, col. 5.

One of the more important capacity enhancement actions is the addition of a runway to an airport. One runway, properly equipped for independent IFR operations, can increase an airport's capacity from 20 to 50 percent. But, an 11,000 foot runway, with safety buffers covers 130 acres. An additional 450 acres surrounding the runway must be clear of structures. OFFICE OF TECHNOLOGY ASSESSMENT, AIRPORT AND AIR TRAFFIC CONTROL SYSTEM 113 (1982). The FAA

"banked" or acquired to ensure its availability for future airport operations.[117] For several practical reasons[118] land banking has often been advocated as a necessary practice in meeting the nation's long-term aviation infrastructure needs. Nevertheless land banking is not commonly practiced in the United States for several reasons:[119]

- acquisition of large tracts of land by public agencies can cause shifts in local political power and wealth;
- programs to meet long-range requirements experience difficulty in competing with more urgent, immediate needs for limited public funds;
- depending on state law, an airport authority may be unable to prove "necessity" for the land acquisition, have jurisdictional limitations on where property may be acquired, or be restricted in financing for land banking purposes;
- during the stage in which the land is underutilized, the public agency may face high land management costs, and confront challenges to continued ownership under government real property disposal policies; and
- Congress has failed to support a national land use policy necessary for a successful land banking program.

2. *There is No Widespread Effort to Convert Underutilized Airports to More Active Components of the National System of Airports*

Some have argued that the airport capacity problem can be solved by increasing the use of hundreds of underutilized airports in the United States.[120] Many of these airports are former military airfields having long runways and considerable undeveloped acreage.[121] Other airports are

---

predicted the United States will need 30,000 more acres by the year 2000 to accommodate airport capacity expansion. DOT/FAA, AIRPORT CAPACITY ENHANCEMENT PLAN, ch. 2 at 7 (DOT/FAA/CP/88-4) (1988)).

117. The Pittsburgh Airport is able to double its present capacity because Allegheny County had the foresight to accumulate land for future airport growth over the past 20 years. *Lack of Airport Capacity Creates "Crisis of Confidence" for Industry*, 129 AVIATION WEEK & SPACE TECH., Nov. 21, 1988, at 98.

118. Among the advantages of early land acquisition: land values are lower; there is a wider choice of sites; and existing owners have less power to hold out for higher prices when the transfer of title is not mandatory.

119. DEPARTMENT OF TRANSPORTATION, AIRPORT LAND BANKING (1977); H. FLECHER, LAND BANKING IN THE CONTROL OF URBAN DEVELOPMENT (1974); A. STRONG, LAND BANKING: EUROPEAN REALITY, AMERICAN PROSPECT (1979); H. DUNKERLEY, URBAN LAND POLICY ISSUES AND OPPORTUNITIES, at 14-16 (1983); Gore & Nicholson, *The Analysis of Public Sector Land Ownership and Development*, in LAND POLICY: PROBLEMS AND ALTERNATIVES 179 (1985).

120. Hamlin, *Boosting Operations at Underused Airports Can Ease Congestion in U.S.*, AVIATION WEEK & SPACE TECH., June 19, 1989, at 173.

121. Between 1961 and 1986 the following military air bases were closed and are still operating as airports. (Approximate acres transferred and length of main runway are provided, if available).

Brookley AFB/Mobile, Alabama
(1,960 acres/9,600' runway)

underutilized because they were overbuilt by their sponsors, or have lost

---

Craig AFB/Selma, Alabama
(2,250 acres/8,000' runway)
McCoy AFB/Orlando, Florida
(2,900 acres/12,000' runway)
Sanford Naval Air Station/Sanford, Florida
(8,000' runway)
Glynco Naval Air Station/Brunswick, Georgia
(4,400 acres/8,000' runway)
Schilling AFB/Salina, Kansas
(2,000 acres/13,000' runway)
Forbes AFB/Topeka, Kansas
(3,500 acres/10,000' runway)
Dow Air Force Base/Bangor, Maine
(11,400' runway)
Presque Isle AFB/Presque Isle, Maine
(1,580 acres/7,400' runway)
Kincheloe AFB/Sault Saint Marie, Michigan
(3,600 acres/7,200' runway)
Duluth AFB/Duluth, Minnesota
(2,200 acres/10,000' runway)
Greenville AFB/Greenville, Mississippi
(2,030 acres/8,000' runway)
Richards-Gebaur AFB/Kansas City, Missouri
(2,300 acres/9,200' runway)
Glasgow AFB/Glasgow, Montana
(5,500 acres/13,500' runway)
Lincoln AFB/Lincoln, Nebraska
(12,900' runway)
Stead AFB/Reno, Nevada
(3,100 acres/8,000' runway)
Grenier AFB/Manchester, New Hampshire
(7,000' runway)
Stewart AFB/Newburgh, New York
(1,900 acres/11,800' runway)
Rickenbacker AFB/Columbus, Ohio
(2,080 acres/12,000' runway)
Clinton County AFB/Wilmington, Ohio
(1,370 acres/9,000' runway)
Clinton-Sherman AFB/Burns Flat, Oklahoma
(3,100 acres/13,500' runway)
Olmsted AFB/Harrisburg, Pennsylvania
(9,500' runway)
Quonset Point NAS/North Kingstown, Rhode Island
(8,000' runway)
Donaldson AFB/Greenville, South Carolina
(2,400 acres/8,000' runway)
Sewart AFB/Smyrna, Tennessee
(2,800 acres/8,000' runway)
Amarillo AFB/Amarillo, Texas
(2,800 acres/13,500' runway)
Webb AFB/Big Spring, Texas
(2,300 acres/8,800' runway)
Harlingen AFB/Harlingen, Texas
(1,600 acres/8,300' runway)
Laredo AFB/Laredo, Texas
(1,900 acres/8,200' runway)
Fort Wolters/Mineral Wells, Texas

(5,000' runway)
Perrin AFB/Sherman-Dennison, Texas
(1,870 acres/9,000' runway)
James Connally AFB/Waco, Texas
(1,500 acres/8,600' runway)
Larsen AFB/Moses Lake, Washington
(7,200 acres/13,500' runway)
Truax Field/Madison, Wisconsin
(9,000' runway)

OFFICE OF ECONOMIC ADJUSTMENT, DEP'T OF DEFENSE, 25 YEARS OF CIVILIAN REUSE: 1961-1986 (1986). *See also* Moorman, *From Military to Mufti*, AIR TRANSPORT WORLD, Sept. 1989, at 85.

In 1988, The Defense Secretary's Commission on Base Realignments and Closures recommended the following military airfields for closure.

Chanute AFB/Rantoul, Illinois
George AFB/Victorville, California
Mather AFB/Sacramento, California
Norton AFB/San Bernardino, California
Pease AFB/Portsmouth, New Hampshire

DEPARTMENT OF DEFENSE, BASE REALIGNMENTS AND CLOSURES (1988); Quinones, *Closed Military Bases Have Potential for New Airports*, AIRPORT SERVICES, May, 1989, at 72.

Besides closures, some active military airfields are able to accommodate the joint civil/military use of the facility. Twenty-four joint use facilities are now in existence. When requested by a local government, the military service responsible for the field will evaluate the potential for joint use based on: airspace limitations, airfield configuration, navigation aids, land availability, aircraft arresting systems, encroachment, security, and environmental impact. Joint use may not be approved if:

- the field is used by a nuclear alert force;
- the field has an intensive pilot training mission;
- the joint use proposal would require co-location of military and civil aircraft; or
- access to the civil facilities would require route access through the military installation.

DEPARTMENT OF DEFENSE/DOT, THE PLAN FOR JOINT USE OF MILITARY AIRFIELDS (1982), KIERNAN, TECHNICAL FEASIBILITY OF JOINT USE: SCOTT AFB, SELFRIDGE AFB, AND EL TORO MCAS (1988).

Also, military property adjacent to airports has been transferred quite often to accommodate the expansion of civil airports. J. MILLER, STAPLETON INTERNATIONAL AIRPORT: THE FIRST FIFTY YEARS 87-89, 95-96, 107-110, 118, 131 (1983) (discussing transfers of property belonging to the Army's Rocky Mountain Arsenal to allow expansion of Stapleton); Hancock, *Information on Land Exchanges*, MCRD San Diego: 1919-1989, July 10, 1989 (unpublished manuscript) (citing several transfers of Marine Corps property to Lindbergh Field).

During WWII the number of airports in the United States doubled, as hundreds of communities donated or sold land to the government for the war effort. In a few short years the government spent $3.2 billion to construct runways and other airport facilities. At the end of the conflict the War Assets Administration (WAA) returned about 700 airports back to local governments. Many of these became the foundation of subsequent airport development in the nation. C. DEARLING & W. OWEN, NATIONAL TRANSPORTATION POLICY 29-30 (1949); A HISTORY OF THE UNITED STATES AIR FORCE: 1907-1957 189 (A. Goldberg ed. 1957); Borland, *That Excess Military Airport*, AIRPORTS, Mar. 1948, at 24; Colbert, *Airports as Base of Air Power*, AVIATION WEEK, Feb. 23, 1948, at 69; Hoehling, *They're Giving Away 400 Airports*, May, 1947, at 26.

But not all excess military airfields are converted to civil aviation uses. In 1964 the Air Force closed all flight operations at Bolling Air Force Base, across the Potomac River from National Airport. While many advocated the base's use for general aviation activity to relieve congestion at National Airport, the Air Force converted the installation to an administrative facility, along with

previous aviation business to other airports in the region.[122]

An important use of such facilities is the diversion of general aviation activity from congested hub airports.[123] In other cases the facilities could be improved to accommodate commercial aviation use. Notwithstanding these advantages, several factors limit the conversion of such fields to more intense use.

- Many underutilized airports are in regions of the country without a large demand for increased aviation activity.
- Notwithstanding existing acreage and facilities, underutilized airports typically need significant capital investment to return them to productive capacity.[124]
- Portions of the airport property may have been committed to non-aviation public uses which enjoy strong local support.
- If expansion of the airport would compete for aviation activity with a major airport in the region, the sponsors of the larger airport (and the airlines based at that airport) may exert considerable political clout to curtail growth of the smaller field.[125]
- Many communities elect to limit airport growth to avoid problems of noise and other effects.[126]

---

the construction of military family housing. R. BURKHARDT, THE FEDERAL AVIATION ADMINISTRATION 144-45 (1967).

122. Major airlines serving Alaska have pulled out of the Juneau and Fairbanks airports, to consolidate operations at Anchorage. Fried, *Air Biggest Transport Segment*, ALASKA J. COM., July 18, 1988, at 8.

123. *See* Walker, *Taking Off; Airport Expansion is Under Way*, L.A. Times, Aug. 9, 1988, § 2, at 1, col. 1 (discussing efforts by John Wayne Airport to squeeze out GA aircraft); *Atlanta Encouraged to Build Second Airport*, 5 AIRPORT 202 (1988) (Atlanta wants to spend $537 million on a major GA airport south of the city to allow for increased capacity at the Hartsfield Airport).

124. In 1968 the Air Force transferred Olmstead Air Force Base near Harrisburg, Pennsylvania to the state for use as a National Guard facility. During the next four years the operation of the base became a significant drain on the budget of the state's Military Department. The cost of maintaining the extensive and old infrastructure was high. In 1972 the field was transferred to the Pennsylvania Department of Transportation for economic development purposes. The Transportation Department built a road access, vehicle parking, and terminal facilities to attract commercial aviation activity. Later attempts to transfer the airport to the local government were unsuccessful because of extensive Trichlorethylene (TCE) contamination from the prior Air Force ownership. State and federal clean up costs have been and will continue to be high. NAT'L GOVERNOR'S ASSOCIATION, SUCCESSFUL AIRPORT CAPACITY EXPANSION, Feb. 1989, at 24-27.

125. Two airports with significant growth potential curtailed by competition with other airports in the region are: former Richards-Gebaur Air Force Base (Kansas City); and Stewart (former Air Force Base) International Airport (New York Area). Feldman, *supra* note 41, at 18. *Richards-Gebaur AFB transferred to Kansas City*, AIRPORT F., Oct. 1985, at 61.

126. *E.g.*, Brayton, *MNAA Agrees to Seek Development of Smyrna Airport*, NASHVILLE BUS. J., Dec. 19, 1988, at 14 (discussing successful effort by local residents to limit the civil aviation use of former Sewart Air Force Base). One of the critical reliever airports for Kennedy and Laguardia, Long Island MacArthur Airport, has been kept from expanding by its owner, the Town of Islip, to limit noise impacts. Kornfeld, *Airport Growth: Problems Amid Promise*, N.Y. Times, Apr. 24, 1988, § 12L1, at 1, col. 1. *See also* Kornfeld, *Republic Airport has Growth Pains*, N.Y. Times, Oct. 1, 1989, § 12L1, at 1, col. 1.

Of course, the longer an airport goes underutilized, the greater the likelihood it will be converted to uses which make future airport expansion unlikely. In some regions of the country aviation interests have expressed concern over the sale of airport properties to commercial, industrial, and mixed-use developers.[127] If land values continue to rise, and local governments look for means to fund important community programs, the loss of airport property will likely continue.[128]

3. *Failure to Respond to Environmental Concerns or Satisfactorily Complete Statutory Environmental Documentation Requirements Delay or Sidetrack Major Airport Projects*

During the last two decades the public has become more and more concerned with the environmental consequences of public works initiatives. Such concerns are aggravated when a public agency conducts planning in a secret, careless, or haphazard manner. The public distrust which this generates can be translated into opposition through the legal and political process.

Among the most potent legal tactics available to frustrated citizens is the right to sue over agency non-compliance with federal and state environmental documentation requirements. In 1969 Congress passed the National Environmental Policy Act[129] which required all federal agencies to consider the environmental consequences of proposed "major federal actions significantly affecting the quality of the human environment." Because of this, and similar state laws, airports must begin early in the planning process to identify, and if possible mitigate, the environmental consequences of major actions. The following deficiencies in preparing

127. Day, *Small Airports Nose Diving in Number*, Wash. Post, Sept. 21, 1987, § F1; Garbarine, *Developers Home in on Small Airports*, N.Y. Times, Jan. 15, 1989, § 10, at 13, col. 1; Haines, *The Waiting Game*, AOPA Pilot, Aug. 1989, at 63. In October 1988, most of New Jersey's small airports shut down for a day to protest the continuing loss of airports within the state. In 5 years the number of airports had shrunk fourteen percent as property was converted to shopping malls and industrial parks. Also, the airports sought recognition that local communities were not supporting their airports through local compatible use zoning. Worthington, *NJ Airport Protest Triggers Legislative Hearing on Concerns*, Airport Services, Apr. 1989, at 10.

128. With property valued at $33 million Linden, New Jersey wanted to sell its airport to developers. But, the sale required special legislation to remove a deed restriction which provided that the property be maintained for aviation uses. Elliott, *Move to Close Linden May Affect Other GA Airports*, Airport Services, Feb. 1987, at 10.

129. 42 U.S.C. § 4321-4347 (1977 & Supp. I 1989). For a general discussion of this statute see Chamousis, *The National Environmental Policy Act of 1969: What "Alternatives" Must an Agency Discuss?*, 12 Colum. J.L. & Soc. Probs. 221 (1976); Murchison, *Does NEPNA Matter? An Analysis of the Historical Development and Contemporary Significance of the National Environmental Policy Act*, 18 U. Rich. L. Rev. 557 (1984); Annotation, *Necessity and Sufficiency of Environmental Impact Statements Under § 102(2)(c) of National Environmental Policy Act of 1969 in Cases Involving Transportation Projects*, 62 A.L.R. Fed. 664 (1983).

such documentation can lead to significant delay in project approval and implementation;[130]

- failure to explore rigorously and evaluate objectively all reasonable alternatives;
- lack of complete and thorough discussion of environmental consequences of the proposed action and each alternative;
- failure to identify the conflicts between the proposed action and the objectives of federal, regional, state, and local land use plans, policies and controls;
- insufficient consideration of the cumulative impact on the environment resulting from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions;
- failure to exercise good faith in disclosing to the public all information necessary for adequate opportunity to comment on the proposed action, its alternatives, and the environmental consequences; and
- lack of assessment and consideration of all public comments to the agency proposal, or failure to respond fully to all comments raised.

While airport operators express significant frustration over these requirements, faithful adherence to this process can be a systematic and thorough way to ensure that a project is integrated into the community. While the cost to the airport of such integration can be high, it may be necessary in order for the airport to compete for declining resources available to meet social requirements. One way to force prioritization among competing demands on limited land, air, and water resources is to require justification and public negotiations similar to this environmental documentation process.[131]

4. *Also, An Airport's Ability to Obtain Project Funding has a Marked Influence on Expansion Potential*

Another important determinant of airport expansion potential is ac-

130. The classic case was the plan to build the Westway highway in New York City. Ackman, *Highway to Nowhere: NEPA, Environmental Review and the Westway Case*, 21 COLUM. J.L. & SOC. PROBS. 325 (1988).

Among the more frustrating airport projects of the last twenty years was the Everglades Jetport in Southern Florida. The airport was planned in a 39-square-mile tract in the Big Cypress Swamp. With initial approval from federal, state, and local agencies ground was broken on September 18, 1968. But, within five weeks efforts to obtain a road access right-of-way raised concerns from the National Park Service and by the local flood control district. The right-of-way question snowballed from a local to a national issue. Under close congressional and Park Service scrutiny, it was learned that environmental considerations played almost no part in the siting decision. Further study revealed likely serious environmental damage to the Big Cypress Swamp. This caused the state and local governments to look for another site. Eventually the state concluded there was no need for a new major airport in the region. The original site was abandoned for commercial aviation purposes. E. WILLIAMS & A. MASSA, SITING OF MAJOR FACILITIES: A PRACTICAL APPROACH 16-17 (1983).

131. M. O'HARE, L. BACOW & D. SANDERSON, FACILITY SITING AND PUBLIC OPPOSITION (1983).

cess to funds.[132] Capital expenditures for large and medium hub airports run about $1 billion per year. About half of that is for new capacity. The federal share of that investment represents about thirty-three percent, with eleven percent coming from state funds. The remainder (fifty-six percent) must be generated locally. Many airports turn to the bond market for this funding.[133]

But an airport's ability to access private capital is entirely a function of financial performance. Purchasers of bonds want assurances that an airport can generate net revenue sufficient to pay interest and principal on bonds.

This financial health is measured by two rating agencies in New York that deal with bond issues: Standard and Poors (S & P); and Moody's Investors Service. These agencies rate airport performance, which influences the interest rate and sale of a bond issue.[134] Among the important factors[135] influencing airport ratings are:

- an airport's status in the nation-wide system of airports;
- existence of another airport in the region which may compete for aviation business, thus reducing revenue potential;
- whether an airport relies too much on tourism for its aviation activity;
- if there is a good mix of air carriers.
- the forecasted demand of airport activity;
- health of the local economy;
- the interrelationship between airport and airlines based at the airport;
- the financial health of the carriers serving the airport; and
- the airport proprietor's historic coverage of debt service.

---

132. Delays in expanding both Laguardia and Kennedy Airports were caused, in part, by New York City's fiscal crisis during the 1970s. Green & Tuchman, *No Where to Go But Up*, ENGINEERING NEWS-REC., Oct. 22, 1987, at 22.

133. TRANSPORTATION RESEARCH BOARD, THE CHANGING GOVERNMENT ROLE IN AIRPORTS 28-31, CIRCULAR 316 (1987). Generally, airports spend only 15% of their capital budget on airside capacity expansion. The remainder is for roads, parking facilities, terminals and other landside projects. NAT'L COUNCIL ON PUBLIC WORKS IMPROVEMENT, THE NATION'S PUBLIC WORKS: REPORT ON AIRPORTS AND AIRWAYS 41 (1987). During 1988 there was an almost 200% increase over the previous year in the airport revenue bond volume. Minerva, *Airports Adopt to Deregulation*, CREDIT WEEK, Aug. 22, 1988, at 1; *Market for U.S. Municipal Airport Bonds Soars*, AIRPORT HIGHLIGHTS, Dec. 5, 1988, at 2.

Venture capital groups have looked at airports for potential investment opportunities. Most believe, however, that airport improvement funding should remain under public sponsorship due to the strong political issues and unpredictability of noise abatement costs. *Venture Capitalist to Seek Airport Profit Opportunities*, AIRPORTS, June 20, 1989, at 1. *See also* ROTH, *Airport Privatization*, 36 PROC. ACAD. POL. SCI. 74 (1987).

134. Ross, *Facilities Planning from a Financial Perspective*, AIRPORT SERVICES, July 1986, at 47. Continued uncertainties in the airline industry keep all U.S. airports from receiving the highest credit rating. Minerva, *Airport Rating Criteria Update*, CREDIT WEEK, Aug. 22, 1988, at 3.

135. *Not* an important factor in rating airport performance is the threat of law suits. Bond dealers believe that most noise suits are settled for only a small fraction of the claim. Walters, *California Airport Authorities Weigh Financial Impact of Ruling on Jet Noise*, BOND BUYER, Mar. 4, 1986, at 4.

Also, investment institutions recognize the importance of accountability, planning, and leadership in the financial health of the airport.[136]

III. Federal Airport Policy

A. The Federal Aviation Administration, While Balancing Diverse National Objectives, has the Federal Responsibility for Aircraft Noise Control and Airport Capacity Enhancement

The primary federal responsibility for the control of airport noise and the enhancement of airport capacity belongs to the Federal Aviation Administration (FAA) within the Department of Transportation. The FAA,[137] formerly the Federal Aviation Agency, was established by the Federal Aviation Act of 1958.[138] Under that Act, the FAA has several statutory obligations, including:

- regulating air commerce to promote its development and safety, and fulfill the requirements of national defense;
- controlling the use of navigable airspace in the interest of safety and efficiency;
- certifying airmen, airplanes, and certain airports; and
- developing regulations to control aircraft noise, and other environmental effects of civil aviation.

While Congress gave the FAA broad powers over these and other duties, the federal statutes restrict the Agency's federal authority over owners or operators of airports in the exercise of their "proprietary powers and rights."[139] The intent of this provision was to recognize the role of airports, owned by local authorities, in the national system of air transportation. But the appropriate extent of that local role is frequently debated, and is not always resolved within federal law.

Besides airport owners and operators, the Federal Aviation Act recognizes the importance of "air carriers," meaning those individuals or

136. *See* Minerva, *supra* note 134, at 3.

137. The Federal Aviation Administration is a large federal agency with an extensive data file on airmen, aircraft, and airports. The Agency is run by an Administrator and several Associate Administrators who oversee aviation safety, air traffic, airway facilities, airports, aviation standards, national airspace system development, regulation and certification, human resource management and policy, planning, and international aviation. The Administrator is represented by nine regional offices in the United States, each with jurisdiction over a multistate area. These offices carry out policies and enforce the rules and regulations developed by FAA Headquarters. The FAA also has international regional offices, and a training academy in Oklahoma City. At the local level the FAA has various airport district offices, civil aviation security field offices, aviation medical clinics, aircraft certification offices, manufacturing inspection district offices, towers, centers, and flight standard offices.

138. Pub. L. 85-726, 72 Stat. 731 (codified as amended in scattered sections of 49 U.S.C.) 49 U.S.C. app. § 1304 (West 1976 and Supp. I 1990).

139. 49 U.S.C.A. app. § 1305(b) (West 1976 and Supp. I 1990).

business entities which use aircraft to carry persons or property for compensation.[140] By statute the FAA is to promote the development of the air commerce in which these carriers operate.[141] Unfortunately, the diversity and competition among those in the aviation industry make it difficult for the FAA to select among various alternatives in promoting air commerce.

In addition to the role of airports and air carriers, FAA policy is influenced by competing concerns within the executive and legislative branches of the federal government. The Department of Transportation,[142] the Department of Defense, the Department of Justice, the Office of Management and Budget, and congressional members and committees can exercise considerable influence over FAA actions. Among the issues of importance to these government bodies and individuals are:

- The safe operation of aircraft to reduce the loss of life, and injury to persons and property, to the maximum extent possible;
- The security of aviation passengers from terrorist activity;
- The need to bring deficit spending under control;
- The assurance of sufficient airspace for combat readiness training;
- The protection of states and local governments against unreasonable, intrusive interference from the federal government;[143] and
- The protection of homeowners in the vicinity of aviation activity against high levels of aircraft noise.[144]

One consequence of these competing missions is that airport problems may not receive much attention within the Agency. Because of the FAA's direct responsibility of and investment in air traffic control

140. *Id.* at § 1301(c).

141. *Id.* at § 1303.

142. The FAA has not always had a harmonious relationship with the Department of Transportation. During the 1980s Members of Congress, Presidential Commissions, and the aviation industry suggested making the FAA an independent agency, separate from the Department of Transportation. It was perceived that Department of Transportation control of FAA delayed program implementation, confused accountability and authority relationships, hampered efforts to improve the professional workforce, and impaired efforts at long-range planning. It was believed that independent agency status would correct these problems and give the FAA more stable leadership. J. HAZARD, MANAGING NATIONAL TRANSPORTATION POLICY (1988); NAT'L COUNCIL ON PUBLIC WORKS IMPROVEMENT, THE NATION'S PUBLIC WORKS: REPORT ON AIRPORTS AND AIRWAYS 117-18 (1987); Wise, *Whither Federal Organizations: The Air Safety Challenge and Federal Management's Response*, 49 PUB. ADMIN. REV. 17, 19 (1989). But, the General Accounting Office has stated the FAA should remain a part of the Department of Transportation to insure integrated planning and financing among modes of transportation and several levels of government. (Testimony of Kenneth M. Mead, Associate Director Resources, Community and Economic Development Division, U.S. General Accounting Office, before the Subcommittee on Aviation of the House Committee on Public Works and Transportation, June 2, 1988).

143. During the early years of the Reagan Administration both the Executive Branch and the Congress were in competition to see which could return the most power to the states, the soonest. *A Grab for Power Between the Regulatory Reformers*, NAT'L J., Jan. 16, 1982, at 95.

144. With the decline in "pork barrel" projects to gain local support, congressmen are much more active in using their authority to support local opposition to federal agency programs. Kau & Rubin, *The Political Economy of Urban Land Use*, 10 RES. L. & ECON. 5 (1987).

equipment and personnel, and the publicity received by aircraft accidents, the Agency dedicates more resources to airspace management and safety. The FAA's primary interests in airports center on the administration of federal grants to airports, and on those airport issues which are linked with the Agency's air traffic and safety responsibilities.

B. FAA's Efforts to Control Aircraft Noise and Its Effects Have Been Subject to Limitations Within the Federal System of the United States

1. FAA Regulation has Caused a Measurable Reduction in Aircraft Noise Emissions, But Several Factors Restrict the Agency's Ability to Accelerate Further Reductions in Aircraft Noise

Soon after the introduction of jet-powered aircraft into the commercial fleet, homeowners near busy airports began petitioning their congressmen for relief. Consequently, during the 1960s considerable congressional interest focused on the problem of aircraft noise. This public and legislative interest caused the President to appoint his Science Advisor to study alternatives to reduce aircraft noise impacts.[145] Then, with the creation of the Department of Transportation in 1966, the overall coordination of this issue shifted to the Secretary of Transportation.[146]

Also, during the 1960s the National Aeronautics and Space Administration, the FAA, and several segments of the aviation industry researched engine and airframe changes to reduce aircraft noise.[147] These studies indicated that noise reduction was feasible, and could benefit many Americans.

Based on this effort, and with the support of the Secretary of Transportation, Congress in 1968 amended the Federal Aviation Act requiring the FAA to prescribe standards and regulations necessary to control and abate aircraft noise.[148] Such control was to be accomplished by adopting minimum noise standards and adding noise criteria to aircraft certification requirements. In applying this law, however, the FAA was to

145. OFFICE OF SCIENCE AND TECHNOLOGY, ALLEVIATION OF JET AIRCRAFT NOISE NEAR AIRPORTS (1966).

146. The Secretary of Transportation was to "promote and undertake research and development relating to transportation, including noise abatement, with particular attention to aircraft noise." 49 U.S.C.A. § 1653(a) (West 1976) (repealed 1983).

147. For a summary of the early research see EPA, AIRCRAFT/AIRPORT NOISE STUDY REPORT: NOISE SOURCE ABATEMENT TECHNOLOGY AND COST ANALYSIS INCLUDING RETROFITTING (1973). For modern design changes to reduce aircraft noise see NATO REPORT NO. 163, AIRCRAFT NOISE IN A MODERN SOCIETY (1987); Kandebo, *HSCT Propulsion Studies Focus on Reducing Emissions Noise*, AVIATION WEEK & SPACE TECH., July 10, 1989, at 34.

148. 49 U.S.C.A. App. § 1431.

assure that any standard was "consistent with the highest degree of safety" and "economically reasonable, technologically practicable, and appropriate for the particular type of aircraft, aircraft engine, appliance, or certificate to which it will apply."

Based on this statute, in 1969 the FAA published Federal Aviation Regulation (FAR) Part 36 establishing the maximum allowable noise levels for aircraft certified after that date.[149] Aircraft which were certified prior to the publication of the 1969 standard, and which were not thereafter modified to satisfy the 1969 standard, became known as "stage 1" aircraft. Aircraft meeting the 1969 standard are now referred to as "stage 2" aircraft. In 1977, the FAA revised its 1969 rule adopting a stricter standard for aircraft noise emissions for all aircraft certified after that date. These aircraft became known as "stage 3" aircraft, and are significantly quieter than stage 1 planes.[150]

During the mid-1970s the FAA was faced with pressure[151] to adopt a

149. Noise Standards: Aircraft Type Certification, 34 Fed. Reg. 18, 355 (1969), codified at 14 C.F.R. 36 (1989). With the publication of these standards the FAA stated that the Agency was making no determination that the noise levels were or should be acceptable to individual airport proprietors responsible for local concerns about noise impacts. *See Id.* § 36.5.

FAR Part 36 requires that new aircraft models demonstrate that they do not exceed specified noise levels at three locations around a runway, when the prototype aircraft is operated under standardized testing conditions. The FAA validates manufacturer test results and publishes a list of noise emission levels by aircraft type. The FAA encourages airports to accept these FAA-approved data. Some airports, however, install monitoring equipment to record aircraft noise levels. The FAA opposes such monitoring on the basis of safety. Some pilots may be tempted to "beat the box" by flying in an unsafe manner to reduce the noise over the monitoring point. In addition, constantly changing propagation and meterological conditions can cause noise levels to change from day to day. Remarks of John Wesler, Office of Environment and Energy, FAA, in Conference on General Aviation, Airport Noise, and Land Use Planning (1979), *reprinted in* EPA REPORT NO. 550/9-80-320; Letter from Quentin S. Taylor, FAA, to Bruce V. Pelly, Palm Beach International Airports (July 6, 1988).

150. The substantial noise reductions between earlier stage 1 aircraft and more recent stage 3 aircraft can be illustrated by comparing the Boeing 707-320 and the similarly-sized Boeing 757-200. The approach decibel reading of a stage 1 707-320 was 120.4 dB compared with 95.0 dB for the stage 3 757-200. It is generally accepted that a reduction of 10 dB in noise level represents a halving of the loudness of sound as *perceived* by the average listener. Thus, a reduction of 25.4 dB provides an 83% reduction in perceived loudness. WESLER, STAGE 3 AIRCRAFT: WILL THEY REDUCE NOISE? (Wyle Laboratories Technical Note No. 2, 1987).

Aircraft manufacturers are cautious about releasing specific information concerning the noise levels of new aircraft versions. Most aircraft marketing literature merely states that the new aircraft is "airport compatible." Hilscher, *Airport Compatibility of the Largest Passenger Jet*, AIRPORT F., July 1988, at 32.

The FAA does not anticipate any major technological innovation in the next 20 years leading to a stage 4 aircraft. FAA, ALTERNATIVES AVAILABLE TO ACCELERATE COMMERCIAL AIRCRAFT FLEET MODERNIZATION 3 (1986).

151. After the publication of FAR Part 36, many in Congress became impatient with FAA activity in aircraft noise abatement actions. In order to spur on the FAA, Congress in 1972 amended the Federal Aviation Act giving the Environmental Protection Agency the authority to recommend additional noise regulations to the FAA. 49 U.S.C.A. app. § 1431. In 1972 the EPA

rule banning the operation of stage 1 aircraft in the United States. After much public debate and agency review, the FAA in 1976 implemented a regulation prohibiting the operation of stage 1 aircraft into U.S. airports on and after January 1, 1985.[152]

While this stage 1 aircraft ban greatly reduced the noise emissions of individual aircraft operations, the increase in aviation activity occurring after the deregulation of the airline industry eroded much of the advantage. Today, Congress is under pressure from airport neighbors who claim noise levels have increased and want a ban on stage 2 aircraft.[153]

But, the elimination of all stage 2 aircraft would have economic impacts on the aviation industry. In 1988 stage 2 aircraft made up fifty-eight percent of all commercial aircraft operated by U.S. airlines, and performed seventy-two percent of all departures.[154] Stage 2 airplanes had a 1988 market value of $30 billion and would cost $50 billion to replace immediately.[155] Of course, the cost of replacement declines if the indus-

---

established an Office of Noise Abatement and Control and conducted numerous studies of the problems, affects, and alternatives to aircraft noise abatement. Between 1973 and 1977 the EPA formerly proposed eleven different regulations to the FAA. Most of these proposals were alternatives previously studied by the FAA and rejected on the basis of: safety, economic reasonableness, technological impracticality, or violative of federal-state relationships. In a few cases the FAA did adopt all or a part of the EPA recommendations, but the relationship between the two agencies was strained. In two reports to Congress, the EPA stated that the problem of aircraft noise was primarily "institutional rather than technical." EPA, REPORT ON AIRCRAFT-AIRPORT NOISE (1973); EPA, TOWARD A NATIONAL STRATEGY FOR NOISE CONTROL (1977). *See also* GENERAL ACCOUNTING OFFICE, TRANSPORTATION NOISE: FEDERAL CONTROL AND ABATEMENT RESPONSIBILITIES MAY NEED TO BE REVISED (1989); GENERAL ACCOUNTING OFFICE, NOISE POLLUTION—FEDERAL PROGRAM TO CONTROL IT HAS BEEN SLOW AND INEFFECTIVE 13-18 (CED-77-42 Mar. 17 (1977)). In 1982 the EPA abolished the Office of Noise Abatement and Control. *Noise Control Act Authorization, Hearings before the Subcomm. on Aviation of the House Comm. on Public Works & Transportation*, 96th Cong., 1st Sess. (1979) (statements of Charles Elkins and John Schettino of the EPA, and John Wesler of FAA); *Noise Control Act Oversight, Hearings before the Subcomm. on Resource Protection of the Senate Comm. on Environment & Public Works*, 95th Cong., 2d Sess. (1978) (statements of Martin Convisser of the Dep't of Trans., and John Wesler of FAA); Broder, *A Study of the Birth and Death of a Regulatory Agenda: The Case of the EPA Noise Program*, 12 EVALUATION REV. 291 (1988).

152. 41 Fed. Reg. 56,046 (1976) (phased compliance with Part 36 noise limits).

153. *E.g.*, Minnesota State Legislature Joint Resolution Urging the United States Congress to Adopt Stage 2 Aircraft Fleet Addition and Operation Ban Deadline, *reprinted in* 134 CONG. REC. S5240 (daily ed. Apr. 29, 1988).

The Minneapolis-St. Paul Airport recently renegotiated the leases with air carriers imposing a fee for excess noise, which is intended to force the phase out of stage 2 aircraft using the airport. *Minnesota Airport includes Airline Noise Fees in New Lease*, 6 AIRPORTS 463 (1989).

154. Letter from Richard W. Taylor, Boeing Corporation, to FAA (Mar. 20, 1989) (located in FAA Rules Docket File No. 25790).

155. A new stage 3 Boeing 757-200 aircraft costs about $40 million. *Stage 2 Phaseout*, 1 AIRPORT NOISE REP. 49 (1989); *The Fleet Serving National is Getting Quieter Week by Week*, Wash. Post, Aug. 28, 1988, at B8 (letter from Gabriel Phillips, Air Transport Association).

try is given enough years to retire stage 2 aircraft.[156] The FAA estimates that a phase out target date of the year 2005 would reduce industry costs to $3.5 billion.[157]

In addition to the high cost of conversion, the carriers and the FAA have raised other problems with an early phase out of stage 2 aircraft:

- An operating ban of stage 2 aircraft in the United States would severely impact many third world air carriers who cannot afford new aircraft.[158]
- The production capacity of U.S. manufacturers is limited in meeting a rapid conversion to an all stage 3 fleet.[159]
- An early phase out of stage 2 aircraft would have competitive repercussions because of differing fleet compositions among the affected air carriers.[160]
- An early ban on stage 2 aircraft would increase the operating costs for airlines, driving up air fares, and limiting service to the public.
- There are several policy questions surrounding whether or not, or how to compensate air carriers for the added cost of fleet modernization.[161]

---

156. Presently, however, stage 3 aircraft are not being bought as replacements but as fleet additions. Stage 3 acquisitions are more in response to the need for greater seat capacity than a direct response to aircraft noise regulations. Not only are stage 2 aircraft not being retired, but there is the possibility that additional stage 2 aircraft may be "dumped" on the United States if European countries successfully implement a proposed stage 3 only rule. *See* Proctor, *Capacity Constraints Will Influence Fleet Composition Through 2010*, AVIATION WEEK & SPACE TECH., Nov. 21, 1988, at 87.

157. DOT/FAA, STATUS OF THE U.S. STAGE 2 COMMERCIAL AIRCRAFT FLEET, ch. 2 at 14 (1989).

158. Momberger, *Annoying Noise: And the Two Sides of the Problem*, AIRPORT F., Oct. 1988, at 3.

159. Letter from Julie H. Ellis, Federal Express Corporation, to FAA (Mar. 17, 1989) (FAA Rules Docket File No. 25790).

160. One segment of the air carrier industry, air cargo companies, operate primarily stage 2 aircraft and would be severely impacted by an operating ban. *Interest Groups Struggle with Aircraft Noise Standards*, CARGO FACTS, Mar. 1989, at 5; *Stage 3 Cargo Conversion Would Cost $15.9 Billion*, 1 AIRPORT NOISE REP. 23 (1989); *Noise and Old Age*, CARGO FACTS, Oct./Nov. 1988, at 5.

161. The air carrier industry is split concerning the federal "compensation" for their losses if the FAA regulates an accelerated fleet modernization. *Compare* letter from Edward J. Driscoll, National Air Carrier Association, to FAA (Mar. 6, 1989) (FAA Rules Docket File No. 25790) (claiming the industry should be made financially whole for any losses they incur) *with* letter from Julie H. Ellis, Federal Express Corporation, to FAA (Mar. 17, 1989) (FAA Rules Docket File No. 25790) (suggesting air carriers could accept financial losses if the federal government would guarantee access to airports without use restrictions). Suggestions that the Congress provide investment tax credits or loan guarantees for accelerated fleet modernization run into several problems, including: the inability to extend financial assistance to foreign-based operations; the question of application to general aviation and corporate aircraft operators; the potential that federal financing would spur over-investment by marginal operators; and the increased costs to FAA of administering such a program.

If the federal government offers to "compensate" air carriers by assuring access to airports, the federal government will likely have to assume the liability for noise impacts.

The public perception is that it is unfair to provide air carriers *any* compensation, since they have flown for decades without paying the true social costs of their activity. Rather, any stage 2

- Impacts of a stage 2 operating ban on corporate and business aircraft owners would have to be considered.

The FAA has properly noted that any ban of stage 2 aircraft should not be considered without a comprehensive program for aircraft and airport noise control.[162] Such a strategy should include: improved noise reduction technology for aircraft; operational procedures designed for maximum reduction or aircraft noise; sensible land use planning and control; and direct action, such as soundproofing of buildings or relocation of noise-impacted families and individuals. Of course, each of these actions raises other issues, including federal liability, federal land use planning, and federal budget impacts. Because of the political sensitivity and competing federal policies associated with these issues, the FAA has yet to move ahead with a specific course of action.

Besides achieving a balanced program, the FAA must also define the costs and benefits of various aircraft noise abatement strategies, as required by Executive Order[163] and the Federal Aviation Act.[164] But, the application of cost-benefit analysis has always been difficult in the area of alternative aircraft noise abatement strategies.[165] Accurate analysis requires forecasts of aviation activity and information about air carrier plan-

---

operating ban should include a compensation program to pay homeowners, school districts, and others for their losses. Letter from Matthew Rosenberg, O'Hare Citizens Coalition, to FAA (Mar. 2, 1989) (FAA Rules Docket File No. 25790).

162. FAA, ALTERNATIVES AVAILABLE TO ACCELERATE COMMERCIAL FLEET MODERNIZATION, 1-2 (1986); DOT/FAA, STATUS OF THE U.S. STAGE 2 COMMERCIAL AIRCRAFT FLEET, ch. 1 at 3 (1989). When the focus of noise reduction turns to stage 2 aircraft operating bans, the air carriers complain that the solution is lopsided. They assert that the airlines are being asked to accept a significant economic burden "yet local zoning decisions direct even more individuals into incompatible use areas near airports." Letter from Gabriel Phillips, Air Transport Association, to FAA (Mar. 20, 1989) (FAA Rules Docket File No. 25790).

163. Executive Order No. 12,291, 3 C.F.R. 127 (1982). This executive order has stimulated criticism from those claiming that cost-benefit analysis became a political tool during the Reagan Administration. W. ROSENBAUM, ENVIRONMENTAL POLITICS AND POLICY 22-23, 286-91 (1985); ENVIRONMENTAL POLICY UNDER REAGAN'S EXECUTIVE ORDER: THE ROLE OF BENEFIT-COST ANALYSIS (V. Smith ed. 1984); Shabecoff, *Reagan Order on Cost-Benefit Analysis Stirs Economic and Political Debate*, N.Y. Times, Nov. 7, 1981, § 2, at 28, col. 1 (quoting Congressman Henry Waxman).

164. 49 U.S.C. § 1431(d)(4) (1976 & Supp. I 1989).

165. The effect of different noise abatement strategies is not the same. Benefits may accrue to different individuals, in different places, or in different forms. Some strategies require more long-range planning and interinstitutional cooperation. Others are easy to implement. Also, the ever changing aviation industry, financial status of airports and communities, and unanticipated growth in metropolitan areas means cost/benefit analysis must rely on many arbitrary assumptions. DOT/FAA, COST-BENEFIT ANALYSIS AND THE NATIONAL AVIATION SYSTEM (FAA-AVP-77-15 (1977)); S. RHOADS, POLICY ANALYSIS IN THE FEDERAL AVIATION ADMINISTRATION 110-14 (1974).

Examples of incomplete cost-benefit analysis for noise abatement actions include: FAA, FINAL ENVIRONMENTAL IMPACT STATEMENT FOR FAR PART 36 COMPLIANCE, Nov. 10, 1976, Appendix D; NAT'L TRANSP. POLICY STUDY COMMISSION, NATIONAL TRANSPORTATION POLICIES THROUGH THE YEAR 2000, 294-97 (1979); EPA, THE ECONOMIC IMPACT OF NOISE 27 (1971).

ning which are often inaccurate or unavailable.[166] Also, there are many unquantifiable variables pertaining to noise impacts in a neighborhood. For example, valuing the benefits of a quiet environment requires more information than is now available about the social and psychological effects of noise.[167] Also, the possible effect on housing market prices is difficult to isolate from other market influences, except in the most serious cases.[168] Additionally, the losses in time and disruption in schools and offices are not commonly reflected in the market prices of these properties.

2. *The FAA Has Begun to Encourage Better Land Use Planning Around Airports, But Needs to Become More of a Participant in Local Negotiations*

During the early years in which aviation was growing in the United States, cities and communities were experimenting with various methods to control the uses of land which degraded public "health, welfare, and safety." In 1926, a local land use control regulation called "zoning" was upheld as constitutional by the United States Supreme Court.[169] Thereafter zoning grew to become common in urban communities. And, many who were familiar with airports and their neighbors advocated the use of zoning to protect aviation activity and safeguard the lives of prospective homeowners.[170]

---

166. While cost-benefit analysis may consider the economic impacts on air carriers and homeowners, it often does not consider the effects on the airport owner or operator. *See generally* Trumball, *Who Has Standing in Cost-Benefit Analysis*?, 9 J. POL'Y ANALYSIS & MGMT. 201 (1990).

167. *See, e.g.*, Mieszkowski & Saper, *An Estimate of the Effects of Airport Noise on Property Value*, 5 J. URB. ECON. 425 (1978); Nelson, *Airport Noise, Location Rent, and the Market for Residential Amenities*, 6 J. ENVT. ECON. & MGMT. 320 (1979); Pitfield, *The Economics of Airport Impact*, 7 TRANSP. POL. & TECH. 21 (1981).

168. A commonly used method of valuing the social cost of airport noise is through a comparison of real estate values both inside and outside high noise zones. But, this methodology comes under considerable criticism.

- Many people do not have the surplus resources to move to quieter neighborhoods.
- It is difficult for real estate appraisers to untangle the effects of noise on house prices from many other effects.
- There is no accurate method to determine costs of noise impacts on many non-residential properties, such as shopping centers, parks, churches, schools, and so forth.
- Many non-perceived losses (such as long-term effects on physical or mental health) are not reflected in real estate prices.

See also D. PEARCE, SOCIAL COST OF NOISE (1976).

169. Euclid v. Ambler Realty Co., 272 U.S. 365 (1926). For a recent review of *Euclid* and its aftermath *see* C. HAAR & J. KAYDEN, ZONING AND THE AMERICAN DREAM: PROMISES STILL TO KEEP (1989); Caldwell, *Land and the Law: Problems in Legal Philosophy*, 1986 U. ILL. L. REV. 319; Fluck, *Euclid v. Ambler: A Retrospective*, 52 J. AM. PLAN. A. 326 (1986); Tarluck, *Euclid Revisited*, LAND USE L. & ZONING DIGEST, Jan. 1982, at 4.

170. *See* Air Transport Ass'n of America, Airline Airport Design Recommendations 5 (1946); Dworkin, *Planning for Airports in Urban Environments*, 5 URBAN L. 472 (1973); Fenerty, *Legal*

While the federal government expressed some early concern about tall structures which intruded into navigable airspace,[171] the federal agencies responsible for aviation activity generally deferred to local governments regarding land use matters. Unfortunately, because of fragmented local jurisdiction and poor local planning, land use controls are not common around many airports in the United States.[172] The failure to control incompatible land uses has measurably reduced the capacity of many airports, and has led to much fingerpointing by competing parties.[173]

In 1962, the Federal Aviation Agency noted the lack of a federal role in airport environs land use planning as a weakness in federal airport pol-

---

Aspects of Airport Zoning, A.F. JAG L. REV. May/June, 1967, at 40; Gottlieb, *Land Use Controls for Airport Planning*, 3 URB. L. 266 (1971); Hunter, *Zone Now to Save Airports and Lives*, AIRPORTS, Sept. 1944, at 30; Seago, *The Airport Noise Problem and Airport Zoning*, 28 MD. L. REV. 120 (1968); Strunck, *Airport Zoning and Its Future*, 50 A.B.A. J. 345 (1964); Note, *Zoning: The Airport and the Land Surrounding It in the Jet Age*, 48 KY. L.J. 273 (1960).

Airport zoning ordinances, if enacted by local governments, primarily restrict the height of structures near an airport and promote noise-compatible uses on private land. Many such ordinances prohibit or limit residences, schools, and hospitals in noise sensitive areas. But, airport zoning laws generally permit commercial, industrial, and agricultural activities. Height restrictions ("vertical zoning") regulate the height of structures on a graduated basis from the runways. Other hazards may also be controlled, including: activities which produce smoke which could impede a pilot's visibility; uses which create electrical interferences with radio communications between planes and an airport; and air traffic hazards resulting from the improper location of additional airports close to existing airfields. P. ROHAN, ZONING AND LAND USE CONTROL, ch. 15 (1989).

Other nations handle incompatible land use near major airports in different ways.

France: Many public airports have purchased extensive aviation easements over surrounding land.

Germany: Citizens can seek damages to their property interests through an administrative process.

Japan: Citizens may seek compensation for losses in court.

Switzerland: Law mandates noise zoning around airports. Citizens impacted by zoning may claim damages within 5 years after government approval of the zoning plan.

Airport Zoning Procedures: An International Comparison, AIRPORT F., Jun. 1984, at 46.

171. U.S. DEP'T OF COMMERCE, REPORT OF THE COMMITTEE ON AIRPORT ZONING AND EMINENT DOMAIN 9 (1930).

172. *See* R. Derrick, The Efficacy of Airport Environs Zoning: Can It Work Around Developed Airports to Reduce the Impact of Aircraft-Airport Noise? (1976) (unpublished master thesis, George Washington University).

Some are now questioning the legitimacy of zoning. Critics of zoning say a fairer system would encourage adjacent landowners to negotiate development/use restrictions for compatible uses. Mills, *Is Zoning a Negative-Sum Game?* 65 LAND ECON. 1 (1989). *See also* FISCHEL, THE ECONOMICS OF ZONING LAWS (1985); Costonis, *The Chicago Plan: Incentive Zoning and the Preservation of Urban Landmarks*, 85 HARV. L. REV. 574 (1972); Fischel, *A Property Rights Approach to Municipal Zoning*, 54 LAND ECON. 64 (1978); Fleischmann, *Politics, Administration, and Local Land-Use Regulation: Analyzing Zoning as a Policy Process*, 49 PUB. ADMIN. REV. 337 (1989); Posner, *Social Costs of Monopoly and Regulation*, 83 J. POLITICAL ECON. 807 (1975).

173. "From a philosophical standpoint, why should the Federal Government be expected to take local officials off the hook for the failure of local officials to provide for proper zoning?" Statement of Congressman Gene Snyder, *Airport and Aircraft Noise Reduction, Hearings on*

icy.[174] Again, in 1971 a joint Department of Transportation-National Aeronautics and Space Administration study recommended that the federal government adopt a policy encouraging compatible land use planning near airports.[175] At the same time several of the major metropolitan airports became concerned about the growth of homes near their fields, and sought the assistance of the U.S. Department of Housing and Urban Development (HUD). As a result of HUD funding, several airports conducted noise compatibility studies during the early 1970s.[176] HUD's experience helped set the framework for later FAA involvement in this area.[177]

During the mid-1970s the FAA began a pilot program sponsoring noise control and land use compatibility studies for a few airports around the country. But, for many airports without a history of noise conflicts, such studies were not warmly accepted by airport managers and local communities.[178]

H.R. 4359 before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation, 95th Cong., 1st Sess. 332 (1977).

When an airport complained of the absence of local land use restrictions before hearings of the Illinois Pollution Control Board, the local governments responded by saying they were unable to zone effectively because the airport refused to define its long range operational plans. Pavlicek, *O'Hare International Airport: Impervious to Proposed State Efforts to Limit Airport Noise*, 47 J. AIR L. & COM. 413, 444-45 (1982).

174. Office of Management Services, FAA, THE AIRPORT'S FUNCTIONS IN FAA 21-22 (June 30, 1962).

175. DOT/NASA CIVIL AVIATION RESEARCH AND DEVELOPMENT POLICY STUDY: SUPPORTING PAPERS 6-14 (DOT-TST-10-5 (1971)).

176. *See* EPA, LEGAL AND INSTITUTIONAL ANALYSIS OF AIRCRAFT AND AIRPORT NOISE AND APPORTIONMENT OF AUTHORITY BETWEEN FEDERAL, STATE, AND LOCAL GOVERNMENTS, ch. 2 at 30-31 (1973).

177. U.S. DEP'T OF HOUSING AND URBAN DEVELOPMENT, AIRCRAFT NOISE IMPACT: PLANNING GUIDELINES FOR LOCAL AGENCIES (TE/NA-472 (1972)).

178. In July 1977 the FAA approached the Salt Lake City Airport Authority requesting their voluntary participation in a noise control and land use compatibility study. The airport had no history of noise problems and believed the study would open a "pandora's box." The City Planning Director was also opposed to the study because he believed the study would overstate the area needing special land use controls. Both City and County authorities also complained that the onus of solving noise problems should not be put exclusively on land use regulations, but also on airport operational constraints. The airport didn't want to begin the study if as a result operations would have to be constrained. (Remarks of Paul B. Gaines, Airport Director, Salt Lake City Airport Authority, before the Airport Operators Council International Economic/Environmental Conference, Miami, Florida, Mar. 2, 1978).

Many airports were leary of the noise exposure maps used in noise compatibility studies. They feared the creation of noise contour lines would lead to law suits from homeowners. *Airport and Aircraft Noise Reduction, Hearings before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation*, 95th Cong., 1st Sess. 266, 295, 334 (1977) (remarks of Daniel T. Murphy, National Association of Counties; George J. Bean, Hillsborough County, Florida, Aviation Authority; Walter Rockenstein, Minneapolis, Minnesota).

A successful study which arose out of this FAA effort involved the Seattle-Tacoma Airport. DOT/FAA, PLANNING FOR THE AIRPORT AND ITS ENVIRONS: THE SEA-TAC SUCCESS STORY (FAA-EQ-78-15 (1978)).

During the 1970s, as Congress held hearings on the problem of airport noise,[179] numerous witnesses explained that federal action to control aircraft noise emissions would be ineffective unless controls were provided to preclude incompatible land uses near airports. Finally, in 1979 Congress passed the Aviation Safety and Noise Abatement Act,[180] giving the FAA specific responsibilities to promote better land use planning and control around airports. That Act directed the FAA to:

- establish systems to measure noise and to determine the exposure of individuals to noise from airports;
- identify land uses which are normally compatible with various exposures of individuals to noise; and
- establish a program to assist airports to prepare noise exposure maps and develop noise compatibility initiatives.

Based on this statutory authority, the FAA developed and implemented FAR Part 150, which provides federal guidelines and a federally-funded program to assist airports and local governments in noise control and land use compatibility planning.[181] Part 150 has several features which are becoming common planning tools for airports:

- The FAA has recommended limiting certain land uses, especially residential dwellings, within a noise zone defined by the day-night average sound level (DNL) 65 dB contour line depicted on a noise exposure map.[182]
- The FAA has developed a methodology for the preparation of noise expo-

179. *E.g., Aircraft/Airport Noise Control, Hearings Before the Subcomm. on Environment, Energy, and Natural Resources of the House Comm. on Government Operations*, 95th Cong., 1st Sess. (1977); *Authorizations under the Noise Pollution Control Act of 1972, Hearings Before the Subcomm. on Transportation and Commerce of the House Comm. on Interstate and Foreign Commerce*, 95th Cong., 1st Sess. (1977); *Future of Aviation, Hearings Before the Subcomm. on Aviation and Transportation Research and Development of the House Comm. on Science and Technology*, 94th Cong., 2d Sess. (1976); *Aircraft Noise, Hearing Before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation*, 94th Cong., 2d Sess. (1976); *Current and Proposed Federal Policy on the Abatement of Aircraft Noise, Hearings Before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation*, 94th Cong., 2d Sess. (1976); *Aircraft Noise Abatement, Hearings Before the Subcomm. on Aviation and Transportation Research and Development of the House Comm. on Science and Technology*, 94th Cong., 1st Sess. (1975); *Aircraft Noise Control Programs, Hearing Before the Subcomm. on Aviation of the Senate Comm. on Commerce*, 93d Cong., 2d Sess. (1974); *Aircraft Noise Abatement, Hearing Before the Subcomm. on Aeronautics and Space Technology of the House Comm. on Science and Astronautics*, 93d Cong., 2d Sess. (1974); *Aircraft Noise Abatement, Hearings Before the Subcomm. on Aeronautics and Space Technology*, 93d Cong., 1st Sess. (1973); *Noise Control Act of 1971 and Amendments, Hearings on S. 1016 Before the Subcomm. on Aviation of the Senate Comm. on Commerce*, 92d Cong., 1st Sess. (1971).

180. 49 U.S.C. § 2101-25 (Supp. I 1989).

181. The FAA has stated the following goals for its Part 150 program: reduce noncompatible land uses near airport; improve land use planning and control around airports; establish a comprehensive airport noise abatement plan; bring together the parties that have the ability to implement solutions; and promote airport capacity. DOT/FAA, Part 150 Interchange, July 11, 1988. FAR Part 150 is codified at 14 C.F.R. § 150 (1990).

182. 14 C.F.R. App. § 150 (1990).

sure maps.[183]

- The FAA published guidelines for the preparation, and FAA approval,[184] of noise compatibility programs which adopt various noise abatement actions for particular airports.
- Upon completion of a noise compatibility program, an airport may be eligible for federal funds to implement the FAA-approved noise abatement actions.

At the end of 1988 over 200 FAA-sponsored "Part 150" reviews were either completed or nearing completion.[185] Many of these programs have led to changes in flight operations, decisions to acquire noise-impacted land, better exchanges of information between government agencies, and adoption of zoning restrictions.[186] Notwithstanding some success, Part 150 is still in its infancy and may need further refinement. Based on a recent congressionally-directed analysis of Part 150, several program weaknesses were identified by those who had participated in the process:[187]

- Part 150 has no compliance process or enforcement authority to ensure that approved noise compatibility program measures are implemented.
- The Part 150 process often raises unrealistic public expectations regarding the prospects for noise abatement.
- Consultation and coordination under Part 150 vary widely, with many noise compatibility programs developed with only minimal public, local government, and aviation industry input.
- In some cases, senior airport management participate very little in the Part 150 review, allowing consultants to run the study.
- Air traffic control personnel frequently oppose operational changes recommended for reasons of noise abatement, citing a pilot's prerogatives, safety, the need for efficiency, and air traffic controller workload.
- Some Part 150 studies have been used improperly for capacity enhancement with no real noise reduction benefits.
- Noise exposure maps may become out-of-date because of unforeseen changes in operations.
- There is no FAA-sponsored training for airports and consultants on how to prepare and implement Part 150.
- Because of limited FAA manpower, FAA is frequently absent during the

183. *Id.*

184. The FAA may not approve a noise compatibility program, or a portion thereof, if: (inter alia) the program measure(s) would create an undue burden on interstate or foreign commerce (including any unjust discrimination); the program measure(s) are not reasonably consistent with achieving the goals of reducing existing noncompatible land uses around the airport and of preventing the introduction of additional noncompatible land uses; the flight procedure recommendations reduce the level of aviation safety, or adversely affect the efficient use and management of the navigable airspace and air traffic system. 14 C.F.R. § 150.35(b) (1990).

185. Airport Noise Compatibility Planning, 53 Fed. Reg. 44,554 (1988).

186. FAA, RECORD OF APPROVAL, DANBURY MUNICIPAL AIRPORT NOISE COMPATIBILITY PROGRAM, Aug. 22, 1988.

187. *See* DOT/FAA, Part 150 Interchange, July 11, 1988; Numerous letters to FAA in FAA Docket File Number 25660.

very important formative stages of the Part 150 process.[188]

- Since local governments do not have a stake in the outcome of a Part 150 review, they are often uncommitted to support and implement noise compatibility program measures.
- The lack of up-to-date, quality maps of land surrounding airports often make the drawing of noise exposure contour lines of little value.
- There are often property owners beyond the DNL 65 dB noise contour line who believe their interests are ignored by the airport.
- In some communities, a Part 150 study is perceived as just another in a series of airport noise reports all of which are costly and never improve the situation.
- The quality of consultant services varies widely.
- Airports are unclear about the standards under which the FAA reviews noise compatibility programs, causing airport authorities considerable embarrassment when measures which they negotiated in good faith are disapproved by the FAA.
- Part 150 studies and airport master plans are so interconnected that they should be prepared simultaneously, but they often are not.
- Public participation in the Part 150 process is not always encouraged.[189]
- Many suggest that the FAA should provide data concerning single event noise levels, rather than using exclusively the day-night average noise exposure level.[190]
- The relationship between part 150 reviews and the FAA's responsibilities under the National Environmental Policy Act is unclear.
- Most cost/benefit analyses found in Part 150 reports are of poor quality and incomplete.

A troubling aspect among these program weaknesses is the absence of FAA representatives during the development of the airport noise compatibility plans. The recommendations which are often carefully negotiated at the local level have profound effects on the future of airports in the national air transportation system. A greater FAA role in such negotiations would be beneficial for several reasons including: the need to protect the billions of dollars in federal capital investment in U.S. airports; the

188. This point has been stressed frequently by airport managers and airlines. *E.g., Government Policies on Aircraft Noise: Hearings before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation*, 99th Cong., 2d Sess. 46,586 (1986) (testimony of Clifton A. Moore, General Manager, City of Los Angeles Department of Airports; and Clark Onstad, Vice President, Texas Air Corporation).

189. The statute establishing the Part 150 program provides that an airport operator should provide "notice and an opportunity for a public hearing" before submitting a noise compatibility program for FAA approval. 49 U.S.C. App. § 2104(a) (1982). The FAA has interpreted this as a duty of the airport and not of the FAA. Consequently, the FAA has not published guidance on public participation in the Part 150 process. *See* FAA PART 150 INTERCHANGE, Aug. & Sept. 1988, at 2.

190. *E.g.*, Letter from Richard E. Sanderson, U.S. EPA, to FAA (Jan. 18, 1989) (suggesting the FAA add to part 150 noise exposure maps the location of areas where single event decibel levels will exceed: 80 dB, the level when sleep may be disturbed at night; and 98 dB, the level when activities in schools, churches, and hospitals will be disturbed).

opportunity for the FAA to gain a sense of local priorities and concerns important in providing federal program support; and the potential to integrate airport surface and airspace planning.

3. *The Authority of Local Governments Over Airport Use and Adjacent Land Development Continue to Be Used as a Reason for Limiting FAA Efforts to Regulate Uniformly Airport Noise and Its Effects Within a National Air Transportation System*

As it has moved forward with FAR Part 150, the FAA has been careful to point out that specific land use planning and noise abatement actions are matters within the discretion of local governments. The FAA position is summarized in this 1976 Department of Transportation Noise Abatement Policy Statement.

> Airport proprietors are primarily responsible for planning and implementing actions designed to reduce the effect of noise on residents in the surrounding area. Such actions include optimal site location, improvements in airport design, noise abatement ground procedures, land acquisition, and restrictions on airport use that do not unjustly discriminate against any user, impede the federal interest in safety and management of the air navigation system, or unreasonably interfere with interstate or foreign commerce.[191]

Consistent with this position, airport operators frequently exercise their authority to impose use restrictions intended to limit noise impacts on surrounding communities. Such restrictions, however, have been a bitter pill for air carriers, which complain of increased operating costs,[192] safety concerns,[193] and constantly changing airport regulations throughout the Nation.[194]

---

191. DOT, *Aircraft Noise Abatement Policy Statement*, Nov. 18, 1976, at 5.

192. Added costs include: the value of lost flights, cost of purchasing quieter planes, increased flight delay costs.

193. A major aircraft accident in 1988 was the crash near Detroit of a Northwest DC-9. In reporting its findings the National Transportation Safety Board found that the cockpit crew workload and stress had contributed to the accident. The crew knew it was running late and might miss a noise-related curfew that night at John Wayne Airport in Santa Ana, California. Remarks of Captain Richard Deeds, Airline Pilots Association, before the American Bar Association's Aircraft Noise and Airport Access Panel (June 17, 1988) p. 88.

194. Air carriers are faced with local political pressure to impose even greater use restrictions, almost before the ink dries on the previously approved agreement. Without any national standards or guidelines the airlines are unable to effectively challenge the rash of local actions. Ellett, *The National Air Transportation System: Design by City Hall?*, 21st J. Air. L. & Com. 1987; Henderson, *Airlines Seek to Clip Board Wings*; Noise Issue Pits Carriers, Agency they say, Wash. Post, July 18, 1988, at D1. A similar feeling of nobody-being-in-charge was reflected 30 years ago by Congressman Albert H. Busch:

> My experience proved that each time I tried to pinpoint responsibility for noise nuisance there was "buck passing" from one agency to another. To me, it seemed necessary that we go into this question of responsibility and determine who was responsible in each given instance for a particular problem and then, if there was no specified area of

One air carrier association, the Air Transport Association of America, has repeatedly urged the FAA to assert greater federal control to limit the spread of use restrictions.[195] But, the FAA has been impaired from moving boldly against use restrictions for several reasons.[196]

- The legislative history behind the Federal Aviation Act and its Amendments supports broad local government authority in dealing with airport noise.[197]
- The FAA has been unable to define clearly and convincingly when a use restriction unduly burdens interstate commerce in violation of the United States Constitution.[198]
- Past Administrations have resisted preempting local airport noise abatement decisions for fear of having to assume the liability for noise injuries.[199]
- The FAA has not been able to demonstrate that the costs of locally-imposed use restrictions outweigh any benefits.[200]
- During the Reagan Administration, the Department of Justice was reluctant to sue states and local governments on behalf of the United States.[201]

---

responsibility, by legislation fix same and give the proper organization the power to enforce it.

105 CONG. REC. 19,857-59 (daily ed. Sept. 14, 1959) (giving a detailed review of his efforts from 1955 to 1959 to attack the problem of aircraft noise).

195. Braxton, *Airport Growth Forecasts Vary Widely*, L.A. Times, Oct. 27, 1985, § 9, at 1, col. 2; *Airline Observer*, AVIATION WEEK & SPACE TECH., June 13, 1983, at 33.

Often during the 1980's business interests claimed that the federal government had abandoned them in favor of state and local regulation. *E.g.*, Moore, *Dear Feds—Help!*, 20 NAT'L J. 1788 (1988).

196. Through the Part 150 review process a few use restrictions detrimental to national interests have been disapproved by the FAA. FAA Record of Approval, Danbury Municipal Airport Noise Compatibility Program, Aug. 16, 1988; FAA Record of Approval, Palm Springs Municipal Airport Noise Compatibility Program, May 19, 1988. Yet the vast majority of use restrictions go unreviewed and unchallenged by the FAA.

197. *E.g.*, S. REP. NO. 96-52, 96th Cong., 2d Sess. 3, *reprinted in* 1980 U.S. CODE CONG. & ADMIN. NEWS 89, 91-92.

198. The promotion of air commerce is among the most important of FAA's statutory responsibilities. That responsibility is supported by the federal power to regulate interstate commerce found in the United States Constitution. U.S. CONST. art. I, § 8, cl. 3. While the exercise of federal power under the Commerce Clause can preempt conflicting state laws and regulations, Dean Milk Co. v. City of Madison, 340 U.S. 349 (1951), federal courts have typically required proof of both a "national objective" and a "conflict" before overturning local actions. Note, *A Framework for Preemption Analysis*, 88 YALE L.J. 363 (1978).

An important case which considered the issue of an airport use restriction's burden on interstate commerce was United States v. County of Westchester, 571 F. Supp. 786 (S.D.N.Y. 1983). But, because of Justice Department policy limiting suits against local governments, the issue has not been frequently litigated.

199. *See* Yost, *Aircraft Noise Liability and Regulation*, TRIAL, Sept. 1977, at 34; Feaver, *Flights of Anger Over Airports Across U.S.: Responsibility for Loudness is Governmental Hot Potato*, Wash. Post, Jan. 31, 1986, at A17.

200. EPA, AIRCRAFT/AIRPORT NOISE STUDY REPORT: NOISE SOURCE ABATEMENT TECHNOLOGY AND COST ANALYSIS INCLUDING RETROFITTING, ch. 4 at 58-72 and app. A at 2 (1973) (a poor attempt at a cost-benefit analysis for a hypothetical national curfew from 10:00 p.m. to 7:00 p.m.); DOT/FAA, PART 150 INTERCHANGE, July 11, 1988 (discussing need to develop cost-benefit methodology for use restrictions).

201. In 1982 FAA Administrator Lynn Helms announced the federal government's intent to

- It is difficult for the FAA to challenge the basis for a use restriction, because Agency representatives seldom are part of the process which decides the restriction is needed.[202]
- Some use restrictions are beneficial to federal interests.[203]

Notwithstanding these limitations, the last two FAA administrators during the Reagan Administration, Donald Engen and Allan McArtor, advocated the need for a "national noise policy"[204] which would have: mandated the submission of any noise-based operating restriction to FAA for review; established a private right of action for air carriers to litigate airport use restrictions; allowed airports to impose noise-based charges to help finance noise abatement projects; and imposed a stage 2 aircraft operating ban effective in the year 2000 or 2005. But, both Administrators failed to win the support of their Secretary of Transportation.[205] Among the important justifications in 1988 for the Secretary of Transpor-

---

take vigorous legal actions against airports which imposed use restrictions which burdened interstate commerce. Helms, *Noise Pollution and Airport Regulation*, 47 J. AIR L. & COM. 405, 411 (1982). But, no such wave of legal action was forthcoming. Frankly, use of the courts is not a very good method to fashion a national airport policy. The FAA's ability to move quickly against airports is hampered by Justice Department concepts about the proper federal/state balance of authority. Even if justice approval and support is obtained, a case may languish in the courts for two, three, or more years. Also, results in court cases can leave the federal government and the airport with lingering bitterness, which impair future working relationships.

Some have suggested a private right of action which would allow air carriers to sue airports for failure to comply with federal statutory requirements. The pros and cons of such a right are discussed in Ceruzzi, *Quasi-Regulation of a Deregulated Industry by a Safety Agency*, 54 J. AIR L. & COM. 889, 918-22 (1989).

202. Ellett, *The National Air Transportation System: Design by City Hall?*, 53 J. AIR. L. & COM. 1, 22 (1987).

203. The FAA has agreed to restrictions barring scheduled air carrier service from a new general aviation reliever airport in Palm Beach County. The restriction was supported by the FAA because the construction of the new airport reduces congestion at Palm Beach International, and the sponsor of the GA airport also operated Palm Beach International and could "assure that the air carrier needs on the Palm Beach area are fully met." Letter from Quentin S. Taylor, FAA, to Bruce V. Pelly, Palm Beach International Airport (July 6, 1988).

Because of restrictions the early opposition to the Concorde aircraft subsided, allowing regular service in 1986. Allen, *Ten Years of Concorde Operation: The SST is a Proven Airport-Compatible and Economic Success*, 16 AIRPORT F., Feb. 1986, at 61.

204. Henderson, *FAA Chief Calls for Federal Noise Reduction Law*, Wash. Post, Nov. 4, 1987, at B1. *See also* Helms, *Noise Pollution and Airport Regulation*, 47 J. AIR L. & COM. 405, 411-12 (1982).

The idea of a "national noise policy" is not new. *E.g.*, Note, *Jet Noise in Airport Areas: A National Solution Required*, 51 MINN. L. REV. 1087 (1967).

205. In 1986 Secretary Elizabeth Dole returned Administrator Engen's proposal to the FAA stating that several issues were not resolved: the economic impact on air carriers; international repercussions; federal liability for noise damages; and the likelihood of strong resistance from local governments. Memorandum from Elizabeth Dole to Donald Engen (Oct. 2, 1986). In 1988 Secretary Burnley halted Administrator McArtor's promotion of a national noise policy stating it would be presumptive for the federal government to tell local communities what to do. Secretary Burnley cited President Reagan's Executive Order 12,612. Collogan, *The Furor over Airport Access*, BUS. & COM. AVIATION, May, 1988, at 106.

tation's rejection of a "national noise policy" was President Reagan's Executive Order on Federalism.[206] That Order announced an Executive Branch policy favoring local solutions to conflicts unless there was a clear "problem of national scope."[207]

When the Bush Administration took office, the issue of a national airport noise policy came up again. Many hoped the Administration's proposal to publish a national transportation policy would lead to the formation of a comprehensive, broad-based aviation noise position. Unfortunately, when the policy was finally unveiled in February 1990 no such policy was present. The Report merely stated:

> The [aircraft noise] issue is complex, involving concerns over liability for noise impacts, the financial cost of upgrading aircraft noise control standards, and protection of interstate commerce. Interested parties, including the airline industry and State and local governments, have presented a panoply of options ranging from a completely hands-off approach to the issue at the Federal level, to continuation of the current system, to total preemption of State and local regulation of aviation noise. The Department [of Transportation] is committed to improving environmental quality and providing leadership that will promote the effective utilization of system capacity in order to meet the demands of interstate commerce while recognizing the rights of State and local governments to impose land use controls. The impact of noise restrictions, phasing out of stage 2 aircraft, and effective local land use controls around airports should all be considered in resolving this issue.[208]

---

206. Executive Order No. 12,612, 3 C.F.R. 252 (1987), *reprinted in* 5 U.S.C. App. § 601 (Supp. 1989).

207. President Reagan's Federalism Executive Order directs federal agencies to take the concerns of local governments and states into account when developing and implementing agency policy initiatives. The Order's goal is to achieve federal objectives with the least possible adverse effects on the operations and functions of states and local governments. The Executive Order has several features intended to limit federal intrusiveness in sub-federal government affairs.

- Federal agencies must consult with affected states or their political subdivisions during the development of proposals with federalism implications.
- The Office of Management and Budget (OMB) will assess an agency's performance under the Executive Order when the agency submits its regulatory and legislative initiatives for OMB review.
- The Order states that federal agencies may not propose regulations or new legislation affecting the states unless the problem is truly national in scope, and the states, acting individually or together, cannot effectively deal with the problem.

208. DEPARTMENT OF TRANSPORTATION, MOVING AMERICA: NEW DIRECTIONS, NEW OPPORTUNITIES 74-75 (1990). Whether a national noise *policy* ought to include a national noise *standard* is a matter of considerable controversy. Wesler, *Federal Noise Standard Not Workable*, 1 AIRPORT NOISE REP. 191 (1989).

For a comparative analysis of how other nations deal with aircraft noise problems see ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, FIGHTING NOISE: STRENGTHENING NOISE ABATEMENT POLICIES (1986).

C. FAA'S AIRWAY AND AIRPORT CAPACITY EXPANSION INITIATIVES FACE MULTIPLE ACCOUNTABILITY AND PLANNING CHALLENGES

1. FAA'S ONCE BROAD DISCRETION IN MANAGING AIRSPACE HAS COME UNDER GREATER PUBLIC SCRUTINY BECAUSE OF AIRCRAFT NOISE

With mounting concern over capacity shortfalls in the national air transportation system, the FAA is committing more resources to finding solutions to reduce airways and airports congestion. Since the FAA's talent and experience are weighted toward the management of the airways, much of the Agency's focus has been on improving the flow of traffic in navigable airspace.

An example of this focus was the creation of "flow control"[209] in the 1980s. Through this process the FAA seeks to control more efficiently the movement of civil aircraft between major airports. The Agency's Central Flow Control facility in Washington, D.C. uses computers which monitor the national weather picture and anticipated aircraft operations. From this facility FAA personnel are able to smooth air traffic demand among the regions of the country, by rerouting traffic and allowing delays to be taken on the ground at the point of departure rather than in holding patterns at the destination airport. While this approach cannot always be aware of all localized flight conditions, and may result in erroneous decisions in select cases,[210] it has had an overall beneficial impact on the system.

In addition to such centralized control, the FAA is also considering alternatives to better manage traffic in the vicinity of airports. Here the problem is largely the existing FAA rules which disperse aircraft because of poor weather conditions, wake turbulence, and other problems. But, with advances in technology, the FAA may be able to amend its procedures to reduce spacing, and thus increase the volume of traffic which the airways can accommodate. Matters which are receiving FAA attention in this regard, include:[211]

209. OFFICE OF TECHNOLOGY ASSESSMENT, AIRPORT AND AIR TRAFFIC CONTROL SYSTEM 17-18 (1982); Poritzky, *Airports, Airports—Where's the Capacity?*, AEROSPACE AM., Jan. 1985, at 27. Flow control was used during the FAA air controller's strike to manage air traffic safely with a smaller workforce.

210. Central Flow Control has its opponents, such as general aviation users, which believe that flow control is an infringement on the public right of transit. Also, the military services are concerned because flow control could lead to losses in special use airspace.

211. *See* DOT/FAA, AIRPORT CAPACITY ENHANCEMENT PLAN (DOT/FAA/CP-89-4 (1989)); GENERAL ACCOUNTING OFFICE, AIRCRAFT DELAYS AT MAJOR U.S. AIRPORTS CAN BE REDUCED 3-4 (Sept. 4, 1979) (CED-79-102); J. LEBRON & A. SINHA, AIRPORT CAPACITY CHALLENGE: TECHNICAL SOLUTIONS AND LIMITATIONS (1987); George, *Concrete Solutions to Air Traffic Delays*, 63 BUS. & COM. AVIATION, July 1988, at 70; Speech of Oris Dunham, Airport Operators Council International, before the Royal Aeronautical Society Conference (Feb. 20, 1989 London, England).

- improving real-time information on winds and wind gradients;
- gathering actual aircraft performance data to support safe separation reductions;
- applying simulation modeling techniques to evaluate alternative traffic flows;
- developing cockpit traffic displays to provide better situation and traffic information to pilots; and
- reviewing different technology[212] and procedures to allow the simultaneous or near simultaneous use of more than one arrival runway during most weather conditions.

Also, the Agency's air traffic managers are studying multiple options to increase the number of routes into and out of major airports.[213] The first test of such initiatives occurred in 1987 when the FAA began to reroute traffic in and out of LaGuardia, Kennedy, and Newark Airports. But, this effort, called the "Expanded East Coast Plan," created noise impacts over several New Jersey communities which had not previously perceived a noise problem. Angry homeowners eventually sought the support of their congressmen,[214] who put considerable pressure on the FAA to shift flight corridors away from certain communities.[215] In studying the circumstances surrounding the Expanded East Coast Plan, the General Accounting Office noted several factors which may have hindered a resolution of the controversy:[216]

---

212. For twenty years the FAA has been promoting the Microwave Landing System (MLS) to enhance system capacity and mitigate noise complaints. The success of that system, however, requires the support of the airports and users to be implemented. To date, support for MLS has not materialized. NAT'L COUNCIL ON PUBLIC WORKS IMPROVEMENT, THE NATION'S PUBLIC WORKS: REPORT ON AIRPORTS AND AIRWAYS 60 (1987); Feldman, *Noise Growing as Major U.S. Orphan Paying for Noise Control*, AIR TRANSPORT WORLD, Dec. 1987, at 32; *Stretching Airports*, FAA HEADQUARTERS INTERCOM., Apr. 25, 1989, at 1.

213. The FAA is studying or planning to study routing redesigns for the following airports: Los Angeles, Boston, Chicago, Dallas-Fort Worth, Denver, Houston, Kansas City, Miami, Atlanta, Indianapolis, Jacksonville, Anchorage, Albuquerque, and Salt Lake City. DOT/FAA, AIRPORT CAPACITY ENHANCEMENT PLAN (DOT/FAA/CP-89-4 (1989)).

214. Opponents of the Expanded East Coast Plan organized early and well. Many kept private logs of aviation activity and wrote frequently to the Port Authority, New York State, New Jersey State, the FAA Regional Office, and FAA Headquarters. The citizen groups had ammunition to show government incompetence when they received inconsistent letters from different government offices. Robert Kaplan of Marlboro, New Jersey claimed to have letters from FAA Headquarters and the FAA Regional Office, one letter stating the aircraft flying over his house were Kennedy and Laguardia departures at 9000 to 17,000 feet above ground level, the other told Mr. Kaplan he was hearing arrival traffic at 3000 feet. Winerip, *Our Towns: Thirty Seconds Over Marlboro, An Aerial Din*, N.Y. Times, Dec. 6, 1988, § B, at 1, col. 1. *See also Leading Fight Against Airport Noise*, N.Y. Times, Nov. 6, 1988, sec. 12NJ, at 1, col. 1; Witkin, *Plan to Avert Air Traffic Delays on East Coast is Starting Today*, N.Y. Times, Feb. 12, 1987, at A1, col. 3.

215. *E.g.* Remarks of Congressman Florio, 133 CONG. REC. E3231 (1987); 133 CONG. REC. E3340 (1987); and Congressman Rinaldo, 135 CONG. REC. E209 (1989).

216. GENERAL ACCOUNTING OFFICE, AIRCRAFT NOISE: IMPLEMENTATION OF FAA'S EXPANDED EAST COAST PLAN (RCED-88-143 (1988)).

- The FAA had not prepared an environmental assessment of the planned route changes.[217]
- The FAA did not seek public review and comment on the proposed plan.
- The FAA did not evaluate the extent to which the economic benefits of its plan might be offset by social costs in the affected communities.
- FAA's method of evaluating potential community responses to aircraft noise did not alert agency planners to the strong community opposition which occurred.
- FAA's approach to evaluating the impacts of noise and alternatives to mitigate its effects,[218] differed from the evaluation strategies of the State of New Jersey and the Port Authority of New York and New Jersey.

As a result of the controversy over the Expanded East Coast Plan, the FAA is reviewing its policy and procedures concerning "enroute noise"[219] and air traffic operational changes. In particular, the Agency's leadership is taking a careful look at how community impacts are considered during the early stages of air traffic planning.[220] Without a commit-

217. Since the route changes in the Expanded East Coast Plan all occurred at altitudes over 3000 feet above ground level, planners relied on a categorical exclusion in the FAA's environmental regulations which waived the requirement for an environmental assessment for flights at those altitudes. But, the GAO noted that the FAA's regulations recommend an environmental assessment for any categorically-excluded action which has the potential for public controversy. Notwithstanding this recommendation, the FAA did not prepare an environmental assessment even after the public concern was obvious. *Id.*

It is not uncommon for the FAA and airports to receive noise complaints for flights above 3000 feet. *E.g., Departure Noise*, AVIATION WEEK & SPACE TECH., Feb. 27, 1989, at 15 (citing fact that Raleigh-Durham Airport receives noise complaints from residents of Fayetteville sixty miles south of the airport for aircraft at 10,000 feet).

218. Notwithstanding early ineptness in dealing with New Jersey residents, the FAA in 1988 began working with the Port Authority to monitor noise levels, adjust flight routes, and consider various citizen recommendations. Rangel, *Pact is Reached to Cut Jet Noise Over New Jersey*, N.Y. Times, Aug. 29, 1988, § B, at 3, col. 6.

219. Presently, FAA noise regulations cover only airports and their immediate environs. But, the FAA in 1987 gave advanced notice of proposed rulemaking concerning the impact of a new engine under development which would have created significant enroute noise levels. Noise and Emission Standards for Aircraft Powered by Advanced Turboprop (Propfan) Engines, 52 Fed. Reg. 8050 (1987). Subsequently, the FAA decided it did not have sufficient information to determine the human impacts of enroute noise, or the economic consequences of an FAA enroute noise rule. The FAA has joined with NASA to study various questions raised by the initial review. 54 Fed. Reg. 19,498 (1989). *See also Acoustics Community Begins to Tackle Emerging Noise Issue*, 1 AIRPORT NOISE REP. 165 (1989); Dunholter, Harris & Cohn, *Measurement and Analysis Techniques for Determining Impacts from Enroute Aircraft in Very Quiet Settings*, in INTER-NOISE 88 (1988); *FAA Defers Action on Noise Standards for Advanced Turboprops*, WEEKLY BUS. AVIATION, May 15, 1989; Letter from Walter J. Orlowski, McDonnell Douglas Corporation, to FAA, Aug. 31, 1988 (FAA Rules Docket File No. 25206).

220. *See* GENERAL ACCOUNTING OFFICE, AIRCRAFT NOISE: STATUS AND MANAGEMENT OF FAA'S WEST COAST PLAN (RCED-89-84 May 1989). In 1989, FAA Headquarters sponsored a 3-day policy review to look at possible changes to integrate environmental concerns into agency decision making. In particular there needs to be a closer working relationship and accountability between the ATC and community relations functions of the Agency. Interview with James Densmore, Office of Environment, FAA, in Washington, D.C. (Aug. 29, 1989).

ment to resolve community conflicts early in the planning process, it is likely that important air traffic control changes will be delayed because of public opposition.

2. *While FAA Forecasts in Support of Airways Capacity Enhancement are Useful, Additional Resources May be Required to Develop Credible Airport Activity Predictions*

Among the important factors influencing airway and airport capacity enhancement planning is the prediction of future aviation demand. While such forecasting is important for the efficient use of government resources, it is a challenging endeavor with many critics.[221]

Of course, aviation forecasting is risk-laden because commercial air transport activity is closely tied to the everchanging, often unpredictable domestic and international economic environment.[222] Present conditions which affect economic activity, and thereby air transportation, include:[223] widening gaps between wealth and poverty; declining personal savings; regional and international migration pressures; corporate mergers and buyouts; constantly changing technology;[224] shifts in government tax, fiscal and monetary policies;[225] changes in production, marketing, and dis-

221. *E.g.*, D. NELKIN, JETPORT: THE BOSTON AIRPORT CONTROVERSY 51 (1974); Milch, *Inverted Pyramids: The Use and Misuse of Aviation Forecasting*, 6 SOC. STUD. SCI. 5 (1976) (claiming that aviation forecasting is like an inverted pyramid because great decisions stand on little, and often questionable, information).

See also Massey, *Airports Spin the Wheel of Fortune*, AM. DEMOGRAPHICS, Feb. 1988, at 42.

222. *See* B. BLUESTONE, P. JORDON & M. SULLIVAN, AIRCRAFT INDUSTRY DYNAMICS (1981); OFFICE OF TECHNOLOGY ASSESSMENT, AIRPORT AND AIR TRAFFIC CONTROL SYSTEM 10 (1982); TRANSPORTATION RESEARCH BOARD, FUTURE DEVELOPMENT OF THE U.S. AIRPORT NETWORK 33 (1988).

223. NATIONAL COUNCIL ON PUBLIC WORKS IMPROVEMENT, FRAGILE FOUNDATION; A REPORT ON AMERICA'S PUBLIC WORKS 35-41 (1988).

224. An example of changing technology is the development of the "tiltrotor" aircraft under a joint Marine Corps/Federal Aviation Administration program. The aircraft combines the speed of fixed-wing planes with the advantage of vertical-takeoff-and-landing capability. Fleets of these aircraft in the civil sector could serve short-haul routes from facilities close to city centers, relieving congestion at major airports. But, the operating costs would likely be significant; and the increased aviation activity out of small airfields would likely generate noise complaints. *See* Frank, *A New Angle in Transportation: Tiltrotor Aircraft May Solve the Problem of Congestion at Civilian Airports*, L.A. Times, July 4, 1989, § 4, at 1, col. 2; Takagi, *STOL May Give Flight to Aviation Industry*, JAPAN ECON. J., Apr. 15, 1989, at 28 (discussing Japanese development of tiltrotor aircraft); Vine, *Tilt-Rotor Aircraft: A Cure for Airport Congestion*, 26 AIRPORT SERVICES, Nov. 1986, at 43. But the tiltrotor research and development program was put in jeopardy when the Secretary of Defense cut the funding for the plane from the President's Defense Budget. Morgan, *Private Interests Converge and Clash as Funding Lines are Drawn*, Wash. Post, July 25, 1989, § 2, at A4.

225. Changes in political climate, including which party is controlling the national agenda, affect economic conditions for business and industry. Beck, *Parties, Administrations, and Ameri-*

tribution of goods caused by the use of advanced information systems; and improvements in communication.[226]

Notwithstanding the challenges of tracking and interpreting such factors, experienced FAA personal have developed a favorable reputation in publishing forecasts of air transportation activity.[227] Among the forecasts which they prepare and distribute are:[228] air carrier forecasts; regional forecasts; commuters forecasts; general aviation forecasts; FAA workload forecasts; and terminal area forecasts. These forecasts are used by the FAA to plan and budget for air traffic personnel and equipment.[229] But using such forecasts in airport infrastructure planning has always been problematic. While there are formulas for converting national, state, and regional forecasts into individual airport forecasts,[230] the special needs of airport planners and the diversity of local conditions usually require additional forecast refinement. The following considerations are associated with preparing forecasts for airport purposes:[231]

- local traffic pattern operations;
- mix of aircraft based at or using airport;
- different air cargo,[232] air mail, international, and passenger requirements;
- estimates of peak hour activity;

---

can Macroeconomic Outcomes, 76 AM. POL. SCI. REV. 83 (1982); Marcus & Mevorach, *Planning for the U.S. Political Cycle*, 21 LONG RANGE PLAN. 50 (1988).

226. Many have suggested that air travel may be reduced with advances in telecommunications. *See* Pool, *The Communications/Transportation Tradeoff*, in TRANSPORTATION POLICY 181 (A. Alshuler ed. 1979).

227. Office of AVIATION POLICY AND PLANS, FAA, ACCURACY OF FAA FORECASTS, (Bulletin APO-88-1 May 1988).

228. FAA, FAA AVIATION FORECASTS; FISCAL YEARS 1989-2000 (FAA-APO-89-1 (1989)); FAA, TERMINAL AREA FORECASTS: Fiscal Years 1989-2005 (FAA-APO-89-5 (1989)). For a good overview of aviation forecasting see TRANSPORTATION RESEARCH BOARD, AVIATION FORECASTING METHODOLOGY (Transp. Research Circular 348, 1989).

229. *The FAA Forecasting System: Theory and Practice* presented by the FAA's Forecasting Branch at the Regional Workshop on Aviation Forecasting and Economic Planning, Mar. 2 to 6, 1987, (Bangkok, Thailand). *See also* FAA, FAA AVIATION FORECASTS: FISCAL YEARS 1989-2000, 168 (FAA-APO-89-1 (1989)).

230. FAA, AIRPORT MASTER PLANS, June 1985, at 24-27 (Advisory Circular 150/5070-6A).

231. *Id.* at 23. *See also* J. WILEY, AIRPORT ADMINISTRATION AND MANAGEMENT 92 (1986).

232. A special challenge is the forecasting of air cargo activity. Distinctly different patterns of demand exist between air cargo and passenger traffic. Whereas passengers prefer day-time travel, the demand for cargo service is greater at night. Passenger traffic is high during vacation periods. But, when people are on holiday—and because they are—cargo activity is down. The geographic distribution of passengers and cargo is likewise quite different. Major tourist destinations are not likely important centers for cargo. While passengers are of comparable size with similar requirements, cargo comes in varying sizes and may require special handling (because it is alive, or because it is dead and needs refrigeration). Also, air cargo is a very fragmented industry. Freight can be handled by a hundred or more companies at an airport, and there is no industry standard for shipment size, configuration, or documentation. R. DE NEUFVILLE, AIR CARGO IN THE 1980S AND BEYOND (1984).

- local demographic factors;[233]
- likelihood of highway and other infrastructure support for airport expansion initiatives;
- secondary development associated with airport activity, and its effect on the community/region;
- existence of alternate airports which might accommodate or capture additional aviation activity;[234]
- timing of the forecast to be most useful for master plan and environmental decision making;[235]
- valid methods to collect and audit data used in support of airport forecasts; and
- influence of local political climate on future air transportation growth in community/region.

Typically, the FAA relies on airport sponsors to collect data, prepare, and validate many forecasts as part of the airport master planning process. Some experts have claimed such locally-generated forecasts lack quality and uniformity, and suggest ways for the FAA to promote better airport forecasts:[236]

- standardize the kinds of data to be collected in support of airport forecasting;
- develop uniform units of measurement and uniform data collection periods for airport forecasts;
- improve the comparison of forecasts among airports within the same region, and between airports and regional/state/national forecasts;
- increase FAA-sponsored education of forecasting skills for airport planners and their consultants;
- disseminate FAA-prepared studies and information in a timely manner when needed for airport forecasting efforts; and
- create a library of all airport master plans and forecasts for use by airport planners at all levels of government.

Of course, all these considerations mean the development of airport activity forecasts can be a costly enterprise. But, if valid forecasts are not created, the public and the aviation industry risk poor planning, and the inefficient use of scarce resources. Assuming the problem is primarily money and not know-how, the decision whether to adequately fund airport activity forecast becomes an important policy choice for government officials.

---

233. Local factors which influence demand for airport services include: changes in absolute median family income; in-migration as a percentage of population; level of government employment; changes in level of manufacturing employment; accessibility to institutions of higher learning; tourist expenditures. S. GOMES, STATE AIRPORT SYSTEM PLANNING, ch. 5 (1976).

234. *See* Altshuler & Lathrop, *Patronage and Revenue Estimates for the San Francisco Airport Access Project*, 27 TRAFFIC Q. 65 (1973).

235. An example of a mistimed forecast which disrupted the decision-making process is discussed in E. BRIGHT, AIRPORT AREA PLANNING AND IMPLEMENTATION 49-52 (1980).

236. *See* R. DE NEUFVILLE, AIR CARGO IN THE 1980S AND BEYOND 68-91 (1984); J. RODWELL, THE STATES AVIATION FORECASTING NEEDS (FAA Report No. FAA-AVP-79-7 (1979)).

3. *Improved Airport Planning Could Support Better Allocation of Federal, State, and Local Resources*

Assuming credible airport activity forecasts can be developed, they become an important part of government planning for airport capacity enhancement. In such planning the federal government contributes by publishing the National Plan of Integrated Airport Systems and by funding state and regional airport system plans,[237] and individual airport master plans.[238] Of course, airport planning, like forecasting, is under constant scrutiny by those interested in a more efficient use of resources.

The most comprehensive airports plan in the United States is the biannual National Plan of Integrated Airport Systems (NPIAS) published by the FAA.[239] In the NPIAS the FAA draws selectively from individual airport, regional, and state plans and studies to identify airport construction projects potentially eligible for federal funding. While not every airport in the United States is listed, the NPIAS lists all commercial and reliever airports, and many of general aviation airports. The bulk of the plan is a state by state cataloguing of airports, including information about numbers of based aircraft, annual operations, and planned projects combined under five broad construction/acquisition categories. Additionally, the NPIAS summarizes selected policies and concerns relating to airport development in the United States. Among the topics covered are: airport

237. FAA, PLANNING THE STATE AIRPORT SYSTEM (Advisory Circular No. 150/5050-3B, 1989).

238. The preparation of an airport master plan can be one of the more important vehicles to foster consensus among diverse interests. A good master plan has the following characteristics: Anticipates issues and data required by applicable environmental reviews; involves public, community, regional, national leaders and users; ensures that all relevant community plans, goals, and objectives are identified and every effort is made to develop an airport plan consistent with them; clarifies institutional responsibilities necessary for project implementation; establishes schedules, financial resource plans; has specific land use planning, real estate acquisition or exchange, and economic development plans; identifies the airport's role in the regional and national air transportation systems; has a credible cost-benefit analysis of any potentially-controversial projects; thoroughly investigates all reasonable capacity enhancement alternatives; contains details of all off-airport planned development and socio-economic factors; carefully analyzes land banking opportunities; sponsor conducts one-on-one meetings with affected entities, rather than just written communication; forecasts aviation activity; discusses ground access problems and alternatives. FAA, AIRPORT MASTER PLANS (Advisory Circular No. 150/5070-6A, 1985). *See also* Gilbert, *New Airports Won't Come Easy*, AIRPORT SERVICES, May, 1988, at 30.

239. The Federal Airport Act of 1946 required the formation and annual revision of a five-year National Airport Plan (NAP). Pub. L. No. 79-377, § 3, 60 Stat. 171, *repealed by* Pub. L. No. 91-258, § 52(a), 84 Stat. 235 (1970). In 1970, Congress repealed the NAP requirement and established requirements for a coordinated National Airport System Plan (NASP). Pub. L. No. 91-258, § 12, 84 Stat. 221, *repealed by* Pub. L. No. 97-248, § 523(a), 96 Stat. 695 (1982). In 1982, Congress amended the FAA's statutory planning responsibility, requiring the publication every two years of a National Plan of Integrated Airport Systems (NPIAS). 49 U.S.C. § 2203 (Supp. I 1989). The current version of the NPIAS is FAA, NATIONAL PLAN OF INTEGRATED AIRPORT SYSTEMS (NPIAS) 1986-1995 (1987).

activity forecasting policy and process; airport congestion information; FAA policy concerning airport safety; discussion of ground access to airports; review of non-construction alternatives to increasing airport capacity; affects of airline deregulation; and airport financing options.

As a compilation of state, regional, and local government construction plans, the NPIAS has been criticized as too narrowly focused on public works infrastructure. Also, the NPIAS fails to prioritize among the many airport capacity enhancement alternatives.[240] Likely, additional or more detailed information could be provided to make it a more useful national planning tool.[241] Such information might include:

- analysis and prioritization of airports as contributors, or likely contributors, to local, regional, and national economies;
- data concerning the population served by each airport;
- prioritization of projects intended to enhance airport capacity;[242]
- a plan of action and prioritization of initiatives to reduce the conflicts over airport noise;
- the identification of additional real estate interests needed for capacity enhancement or noise abatement, along with a prioritization for acquisition;
- additional information and implementation plans for all non-construction alternatives to capacity deficiencies; and
- a review of other government agency activities which affect federal interests[243] in airports.

---

240. *See* NAT'L COUNCIL ON PUBLIC WORKS IMPROVEMENT, THE NATION'S PUBLIC WORKS: REPORT ON AIRPORTS AND AIRWAYS 38 (1987); J. Hines & H. Smetana, National Airport System Plan Entry Criteria: Revalidation and Rationale (May, 1972) (distributed by FAA, Airport Planning and Programming Office); Letter from Clifford Graub, Dep't of Housing and Urban Development, to Office of Noise Abatement, EPA (June 29, 1973).

Some in Congress believe the NPIAS does not fully satisfy the intent behind 49 U.S.C. § 2203. *Reauthorization of the Airport and Airway Trust Fund and Related Issues, Hearings Before the Subcomm. on Aviation of the House Comm. on Public Works and Transportation*, 100th Cong., 1st Sess., 76-77 (1987) (Congressman Norman Y. Mineta).

241. Preparation of the Nation's airports plan has had a long and frustrating history. Office of Management Services, FAA, The Airport's Functions in FAA, June 30, 1962, at 32-39.

242. During the passage of the Airport and Airway Safety and Capacity Expansion Act of 1987, the House and Senate conferees emphasized the need for a national airport plan which prioritized airport capacity enhancement projects, especially in metropolitan areas. 133 CONG. REC. H11696 (Dec. 18, 1987) (remarks of Congressman Hammerschmidt).

243. Much of the controversy over the NPIAS and its predecessors has been over efforts to define the "federal interest" in airports. But, it may not be possible or even desirable to develop a single simple definition of federal interest. It appears that Congress prefers to define federal involvement in airports broadly. Additionally, the federal interest is shaped by tradition and precedent, and by changing national goals and policies from outside the transportation sphere.

The FAA's position is that federal responsibility for an adequate system of airports is *not* coextensive with the federal interest in safety. While FAA's interest in safety extends to every landing area in the nation, the Agency's concern for a national system of airports "extends only to those public use airports which make a significant contribution to air transportation needs." FAA Order 5090.3B, Sept. 9, 1985, Field Formulation of the National Plan of Integrated Airport Systems (NPIAS).

Much of the data for these analyses is already within the FAA. But, the publication and wide dissemination of such information has been restricted for political and budgetary reasons within the executive branch.[244]

4. *Many of the Uncertainties Associated with the Federal Role in Airport Development are Accented in the Federal Airport Grants Program*

Generally, the NPIAS and other airport planning occur as a condition to and in support of government funded airport construction projects. For years[245] the federal government has contributed considerable resources

---

244. It is generally perceived that during the Reagan Administration the Office of Management and Budget held national airport planning and airport grant funds hostage. *See* 133 CONG. REC. H11696 (Dec. 18, 1987) (remarks of Congressman Pickle). Also, the Agency could expect strong political reaction if it prioritized construction projects, thus cutting out currently eligible programs.

It should be noted that other nations also struggle to develop a national airport network plan. E. FELDMAN & J. MILCH, THE POLITICS OF CANADIAN AIRPORT DEVELOPMENT: LESSONS FOR FEDERALISM 26, 52 (1983); Wolf, *Airport Planning in the Federal Republic of Germany: A Critical Review*, AIRPORT F., June 1982, at 57 (citing budget constraints and intergovernmental conflict for failure to develop a national plan in Germany).

245. Widespread interest in building airports began in the late 1920s. Urban chambers of commerce pressed often reluctant city officials to build airports meeting the Department of Commerce's standard for a "first-class field" (2,500 by 2,500 feet). Business leaders wanted to attract air mail routes and aviation manufacturers. Since airport operations generated little revenue, communities sought to make airport property profitable by installing amusement rides, dance floors, and swimming pools.

The early airport building boom ended with the urban and corporate bankruptcies of the Great Depression. Municipal and corporate spending for airports fell from around $35 million in 1930 to only $1 million in 1933.

Beginning in 1933 New Deal work relief programs revived airport construction and began to draw the federal government into airport development. Large amounts of funds were spent by the Public Works Administration and Works Progress Administration for airport construction. But many of these airports were small and often unnecessary. The airports were considered a part of economic recovery rather than needed to support a national system of airports. However, at least two important airports were built during this era: New York's LaGuardia; and Washington, D.C.'s National.

With the outbreak of WWII, the War and Navy Departments took the lead in major airport construction in the United States. All prior funding and plans for airport development were transferred to the military for development of "landing areas for national defense."

In just a few short years, between 1933 and 1945, the federal government's New Deal and war programs spent $800 million to construct 1,066 new airports.

In 1946, Congress established an airport grants program which distributed $1.2 billion to local governments for airport development from 1947 to 1969.

COMMISSION ON INTERGOVERNMENTAL RELATIONS, FEDERAL AID TO AIRPORTS (1955); C. DEARING & W. OWEN, NATIONAL TRANSPORTATION POLICY (1949); H. MERTINS, NATIONAL TRANSPORTATION POLICY IN TRANSITION, 16-17 (1972); PUBLIC WORKS HISTORICAL SOCIETY, PUBLIC WORKS AND THE SHAPE OF THE NATION 39-42 (1987); MUNICIPAL LANDING FIELDS AND AIR PORTS (G. Wheat ed. 1920); Boone, *Campaigning for an Airport*, 24 AVIATION 310 (1928) (discussing efforts of San Diego business leaders to build a major international airport); Friedman, *Birth of an*

to airport development.[246] The current federal airport grant program, known as the Airport Improvement Program (AIP),[247] is administered by the FAA. Under the AIP, an airport listed in the NPIAS can apply for federal funds in support of several types of airport projects.[248] In applying for a grant, the airport sponsor or other eligible grant recipient must make certain "assurances" that legal requirements have been complied with, and must agree to several conditions upon the receipt of federal funds.[249]

Within the last few years the federal expenditures for airports have increased to about $1 billion annually.[250] But this amount still satisfies less than half the projects recognized and approved in the NPIAS.[251] Given these annual deficiencies, the FAA must select among projects

---

Airport: From Mines Field to Los Angeles International, 23 J. AM. AVIATION HISTORICAL SOC'Y 285 (1978); Hinckley, *Airports and the War*, CITY PROBLEMS OF 1942 (U.S. Conference of Mayors, 1942); Park, Porter & Connolly, *An Analysis of Federal Airport Funding Policies*, 34 TRAFFIC Q. 333 (1980); Smith, *The Framingham Airport*, 14 J. AM. AVIATION HISTORICAL SOC'Y 16 (1969); Whitnall, *Municipal Airports*, NAT'L MUN. REV. at 104 (Feb. 1926).

246. The two most important factors influencing airport development are real estate ownership and revenue sources.

247. Airport and Airway Improvement Act of 1982, 49 U.S.C. §§ 2201 - 2227 (Supp. 1989).

248. AIP projects include: site preparation; airfield paving, marking, and signage; airfield lighting and electrical work; navigational aids; terminal, airport roads, walkways construction; safety, security, and support equipment; land acquisition for airport development and noise compatibility; residential noise attenuation. Projects which the FAA will not fund under AIP are: fuel farms; landscaping, general aviation terminals; communication systems (except that which is used for safety/security); hangars; and public parking facilities for passenger automobiles. DOT/FAA, AIRPORT IMPROVEMENT PROGRAM (AIP) HANDBOOK (Oct. 24, 1989) (FAA Order 5100.38A). The FAA has recently reassessed how it will administer AIP funds used for noise abatement projects. DOT, ELIGIBILITY OF NOISE ABATEMENT PROPOSALS FOR GRANTS-IN-AID UNDER THE AIRPORT IMPROVEMENT PROGRAM (DOT/FAA/PP-89-2 (1989)).

249. There are about 30 "assurances" which a grant recipient must make. They include such things as sponsor authority and fund availability; good title; consistency with local plans and consideration of local interest; consultation with users and public hearings; air and water quality standards; accounting, audit, and recordkeeping requirements; minimum wage compliance; civil rights; and economic nondiscrimination. Special conditions, which are attached to the grant agreement, vary depending on the project and its intended use. *Id.* See discussion of statutory obligations of recipients of federal airport grants-in-aid funds in Ceruzzi, *Quasi-Regulation of a Deregulated Industry by a Safety Agency*, 54 J. AIR L. & COM. 889, 909-16 (1989).

250. DOT, AIRPORT IMPROVEMENT PROGRAM EFFECTIVENESS STUDY (DOT-P-36-87-6 (1987)). Generally, the states have not made large contributions to airport development. But, that trend may be changing with states such as Maryland and Florida supporting airport development as a key to the states' long term economic growth. *See* NAT'L GOVERNORS' ASS'N, SUCCESSFUL AIRPORT CAPACITY EXPANSION (1989) (citing recent state expenditures to: develop marketing plans to attract air carrier business; speed up master planning and construction of airport projects; create citizen advisory groups to solve conflicts over noise; support better coordination between airport and highway planning; and purchase necessary land for present and future airport needs).

251. Total annual *demand* for airport capital investment, including all airside and landside projects, is $5.6 billion in the United States. But, not all projects are eligible for federal aid. Projects eligible for AIP funds total about $2.5 billion annually. NAT'L COUNCIL ON PUBLIC WORKS IMPROVEMENT, THE NATION'S PUBLIC WORKS: REPORT ON AIRPORTS AND AIRWAYS 35-37 (1987).

based on its interpretation of the federal interest in airports.[252]

Within the discretionary authority provided the FAA, the Agency has given higher priority to airport projects which enhance capacity and reduce delays, especially in the major metropolitan areas.[253] While, such emphasis is important to the commercial aviation sector and to their passengers, it is not mandated by the law. Rather, the statutes emphasize that federal funds shall support a "balanced" system of airports.[254] Regularly, members of the U.S. House of Representatives remind the FAA that smaller, uncongested rural airports shall receive AIP funding.[255]

Others criticize FAA's management of airport grant funds as placing insufficient emphasis on the efficient use of existing facilities, or on certain long term problems. Illustrative of these concerns are the following:

- grant funds are not managed aggressively to reduce the impact of persistent environmental problems;
- too low a priority is given to the acquisition of land for future airport development (land banking);
- neither the administration of AIP funds, nor the funds themselves, contrib-

252. Of course, valid prioritization can only occur after the project sponsor satisfies numerous prerequisites, including adequate planning and environmental documentation. There is a concern that project proponents, once they make an early commitment to pursue a particular project, will rush the required preliminaries. *See* E. BRIGHT, AIRPORT AREA PLANNING AND IMPLEMENTATION 168-70 (1980).

253. DOT, AIRPORT IMPROVEMENT PROGRAM EFFECTIVENESS STUDY (DOT-P-36-87-6 (1987)); DOT, A FAA BENEFIT-COST ANALYSIS OF THE AIRPORT IMPROVEMENT PROGRAM (AIP), FISCAL YEARS 1982 THROUGH 1985 (FAA-APO-86-3 (1986)); FAA Order 5100.38, AIRPORT IMPROVEMENT PROGRAM (AIP) HANDBOOK, at 29-32 (Feb. 11, 1985); Poritzky, *Airports, Airports—Where's the Capacity*, AEROSPACE AM., Jan. 1985, at 27. Such emphasis is not new. *See* Statement of FAA Administrator Najeeb Halaby *printed in* R. BURKHARDT, THE FEDERAL AVIATION ADMINISTRATION 156-59 (1967).

Among the criticisms lodged against the FAA's interest in large airport capacity expansion are the following:

- given the lack of national planning which supports these expenditures, the federal government is not getting the most benefit for its money; and
- since many large airports are dominated by only one or two carriers, substantial federal grants to these airports may be an inappropriate subsidy to select commercial airline corporations.

Minerva, *Airports Adopt to Deregulation*, Credit Week, Standard & Poor's, at 1, Aug. 22, 1988.

Interestingly, the Reagan Administration considered eliminating aid to large airports during the early 1980s, as a means to reduce federal expenditures. Eventually, those favoring retention of federal influence over airport capacity in metropolitan areas prevailed. *See* DOT/FAA, THE EFFECT OF AIRPORT DEFEDERALIZATION (DOT-P-36-87-4 (1987)); J. PLAIGNAUD, AIRPORTS AND THE TREND IN REGULATORY POLICY 39-40 (1981).

254. *See* 49 U.S.C. § 2202(a)(7) (Supp. 1989). For an excellent study of the difficulties in defining the federal interest in federal grant programs, see CONGRESSIONAL BUDGET OFFICE, THE FEDERAL GOVERNMENT IN A FEDERAL SYSTEM CURRENT INTERGOVERNMENTAL PROGRAMS AND OPTIONS FOR CHANGE (1983).

255. *See, e.g.*, S. RHOADS, POLICY ANALYSIS IN THE FEDERAL AVIATION ADMINISTRATION 35-38 (1974); Letter from Representatives Glenn Anderson, John Paul Hammerschmidt, Newt Gingrich, and Norman Mineta to FAA Administrator Allan McArtor, Apr. 12, 1988.

ute significantly to curtailing incompatible development in the vicinity of airports;[256] and

- the FAA does not require grant recipients to consider and adopt noninvestment capacity enhancement solutions as part of the grant application process.[257]

Similar concerns have been raised about the Airports and Airways Trust Fund,[258] used to support the AIP. That fund was created in 1970 to finance airport and airway improvements through proceeds of user

256. 49 U.S.C. § 2210(a)(5) (Supp. 1989) requires that an AIP grant applicant provide the FAA an assurance that "appropriate action, including the adoption of zoning laws has been or will be taken, to the extent reasonable, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft." The FAA requires grant applicants to provide a "brief description" of their efforts at achieving land use compatibility, or if no action was taken, why not. FAA, AIRPORT IMPROVEMENT PROGRAM (AIP) HANDBOOK, at 163, Feb. 11, 1985 (FAA Order 5100.38). Generally, the needs for airport development, the typical disharmony among neighboring local jurisdiction, and the federal policy against interfering with local land use matters have discouraged the FAA from pursuing a tougher stand on land use compatibility through the AIP. *See* E. BRIGHT, AIRPORT AREA PLANNING AND IMPLEMENTATION 60-63 (1980); *Airport and Aircraft Noise Reduction, Hearings before the Subcomm. on Aviation and the House Comm. on Public Works and Transportation*, 95th Cong., 1st Sess. 3 (1977) (statement of Congressman Gene Snyder).

257. A. GHOBRIAL, ANALYSIS OF THE AIR NETWORK STRUCTURE: THE HUBBING PHENOMENON (1983); NAT'L COUNCIL ON PUBLIC WORKS IMPROVEMENT, THE NATION'S PUBLIC WORKS: REPORT ON AIRPORTS AND AIRWAYS 51-52 (1987); CONGRESSIONAL BUDGET OFFICE, NEW DIRECTIONS FOR THE NATION'S PUBLIC WORKS (1988). Berry, Airport Presence as Product Differentiation, 80 AM. ECON. REV. 394 (1990). The most commonly discussed non-construction alternative is "peak-hour pricing," meaning an increase in landing fees or some other charge for those aircraft using the airport during the most congested periods. Such funds would be used for added capacity expansion projects. The disadvantages of such congestion pricing include:

- the fee could possibly overcompensate for congestion problems, thus unfairly burdening system users;
- the existence of additional funds could increase the pressure for new construction (an "embarrassment of riches") without careful consideration of community impacts;
- fixing an appropriate peak-hour fee would be difficult because of differences in weekly and seasonal traffic flows; and
- peak hour pricing would have a possible unwanted ripple effect on other airports in the system.

Eckert, *An Evaluation of the Airport Development AID Program*, in PERSPECTIVES ON FEDERAL TRANSPORTATION POLICY 117, 126-29 (J. Miller ed. 1975).

An important test of congestion pricing occurred within the last two years at Boston's Logan International Airport. The Massachusetts Port Authority (Massport), which operates the airport, adopted a landing fee schedule which favored large commercial aircraft, but discouraged small commuters and general aviation planes from using the airport. This action immediately generated law suits in federal district court, and petitions to the Secretary of Transportation. Opponents successfully argued that Massport had violated federal statutory provisions in imposing the fees, getting the Secretary of Transportation to support their position. New England Legal Foundation v. Massachusetts Port Authority, 883 F.2d 157 (1st Cir. 1989). *See also* Overbea, *Boston's Logan Airport Ventures Plan for Easing Terminal Glut*, Christian Science Monitor, Mar. 21, 1988, at 7; Overbea, *Boston Backs Down on Program to Reduce Airport Congestion*, Christian Science Monitor, Dec. 29, 1988, at 3.

258. 26 U.S.C. § 9502 (1989).

charges.[259] Users pay special taxes on aviation fuel, passenger tickets, international travel, air freight shipments, and so forth.[260] Theoretically, a system of user charges should encourage aviation users to improve the efficiency of the system. But, under the Airports and Airways Trust Fund charges are *not* directly tied to the use of the system. Consequently, little economic efficiency is achieved through the collection of revenue.[261]

5. *The FAA Has Supported Efforts to Acquire Real Property Interests for Airport Development and Noise Abatement, But the Agency Could Do More*

While the availability of funds for airport construction plays an important role in assuring capacity, an equally important factor is the ownership of sufficient real estate interests for aviation activity. An airport sponsor with substantial fee owned land and easements in surrounding property

259. Since its creation, the Trust Fund has sparked controversy between the Congress and the President. Congress claims the fund is primarily an account for capital projects to assure adequate aviation system capacity. But, each Administration since 1971 has claimed that the Fund should help finance *all* aviation programs, including FAA operations. At various times over the past twenty years the Fund has shifted back and forth between being a capital account and a full user-pay system. Recently, the Congress has claimed the Executive Branch purposefully limited spending on capital projects, in order to use the fund surplus for operations and to count it as an offset against the growing federal budget deficit. Based on this perception, Congress passed legislation linking the FAA's use of Trust Fund revenue for FAA operations to the level of expenditures for capital projects. *See* H. MERTINS, NATIONAL TRANSPORTATION POLICY IN TRANSITION 50-51 (1972); CONGRESSIONAL BUDGET OFFICE, THE STATUS OF THE AIRPORT AND AIRWAY TRUST FUND (1988); NAT'L COUNCIL ON PUBLIC WORKS IMPROVEMENT, FEDERAL TRUST FUNDS: OPTIONS TO USE THE CASH (1987). The problem with this wrangling between the two branches of government is that the surplus in the Trust Fund continues to grow, creating a public perception that aviation system users are being denied benefits from the taxes they paid. *Airport 1987*, Pilot (Norfolk, Va.), May 17, 1987, Editorial, *reprinted in* 133 CONG. REC. E3348 (daily ed. Aug. 7, 1987).

260. Another item of contention has been the claim that general aviation users pay a much lower percent of the total cost of their burden on the system than do the commercial aviation users. Allegedly, the commercial sector pays nearly equivalent the amount of their burden on the system, while general aviation pays less than one-fourth of their burden. CONGRESSIONAL BUDGET OFFICE, NEW DIRECTIONS FOR THE NATION'S PUBLIC WORKS 58-59 (1988). Of course, such comparisons may be suspect because of the many different ways of determining both the "burden" and the "system". *See* DOT, AIRPORT AND AIRWAY COST ALLOCATION STUDY (1973) (citing at least ten ways to evaluate costs created by aviation activity).

261. The bulk of the Trust Fund revenue is collected from a tax on tickets. This tax and the other trust fund taxes are relatively easy to collect, but they are not a function of system usage. If the taxes were more closely associated with usage, greater system efficiency might be achieved. Suggested use-based fees might include: charges for flight plans with the amount of the fee dependent on the value of the air traffic control services used; variable landing fees based on the services provided by the airport. But, such fees are often opposed for reasons of safety and added administrative costs. CONGRESSIONAL BUDGET OFFICE, POLICIES FOR THE DEREGULATED AIRLINE INDUSTRY 68 (1988); NAT'L COUNCIL ON PUBLIC WORKS IMPROVEMENT, FEDERAL TRUST FUNDS: OPTIONS TO USE THE CASH (1987); A. SINHA, AIRPORT AND AIRWAY COSTS AND USER COST RESPONSIBILITY (1977).

has greater flexibility in satisfying the competing demands by aviation users and community leaders.

In support of this need for real estate interests, the federal government has made substantial contributions. Many of the nation's airports operate on property acquired by the United States and then transferred to local governments for airport use.[262] Additionally, federal grant funds have been frequently used by communities to purchase additional real property for airport development and for noise abatement.[263]

Notwithstanding this good record, FAA's policies toward airport land acquisition are typically conservative or cautious, rather than proactive.

- The FAA often takes a passive role in the identification and capture of federal surplus real property and other federal lands for airport purposes.[264]
- Given the importance of land assembly to the development of airport capacity, the FAA has relatively few employees with real estate and land use planning experience/responsibilities.[265]
- While the Agency has recommended land banking in support of future airport development,[266] its own AIP fund priority system makes such land acquisition less likely.[267]

Of course, deference to local land use prerogatives is the more com-

---

262. As of 1986 there were 638 airports in the United States which owned property which was previously transferred by the federal government to local government for airport purposes. FAA, LIST OF PUBLIC AIRPORTS AFFECTED BY AGREEMENTS WITH THE FEDERAL GOVERNMENT, (FAA Order No. 5190.2Q (1986)).

263. During Fiscal Years 1986 and 1987 the FAA approved: twenty-eight AIP grants, totalling $92.2 million, for land acquisitions for noise abatement and obstacle clearance; and twenty-four grants, totalling $50.27 million, for airport development land. DOT/FAA, AIRPORT CAPACITY ENHANCEMENT PLAN, appendix G (DOT/FAA/CP/88-4 (1988)). Between 1973 and 1979 grant funds totalling $23 million assisted local governments to acquire private airports, for public use. GENERAL ACCOUNTING OFFICE, AIRCRAFT DELAYS AT MAJOR U.S. AIRPORTS CAN BE REDUCED 19 (CED-79-102 (1979)).

264. When a federal agency determines that property is excess to its needs, a report is made to the General Services Administration, which notifies all other federal agencies of the availability of such property. Such notifications are common, with numerous announcements disseminated monthly. Once federal agency screening is complete, local governments can request transfer of such property for certain public purposes, including airport development. At one time the FAA screened all federal surplus property for possible airport use. Now, FAA policy and manpower limitations confine the FAA role to validating a local government's claim for federal land in support of an aviation requirement. While FAA personnel have on occasion assisted local governments to identify federal surplus property, such assistance is not uniform. FAA, FEDERAL SURPLUS PROPERTY FOR PUBLIC AIRPORT PURPOSES (FAA Order, 5150.2A (1972)); Interview with Leonard Sandelli, at the FAA Headquarters, Washington, D.C. Aug. 10, 1989.

265. Most of the FAA's real estate specialists only acquire land for FAA purposes, such as towers, navigational aids, FAA administrative offices, and so forth. Few employees have significant responsibilities in support of the real estate acquisition needs of airport sponsors. *Id.*

266. *See* DOT/FAA, AIRPORT LAND BANKING (1977); DOT/NASA, CIVIL AVIATION RESEARCH AND DEVELOPMENT POLICY STUDY: SUPPORTING PAPERS, ch. 6 at 44 (DOT-TST-10-5 (1971)).

267. DOT/FAA, AIRPORT IMPROVEMENT PROGRAM (AIP) HANDBOOK (1989) (FAA Order 5100.38A).

monly expressed reason for a limited FAA role in real estate matters.[268] Nevertheless, the Agency may have to assume a strong leadership role in order to enhance national airport capacity development.[269]

IV. PROPOSED AIRPORT POLICY PRINCIPLES

Much of the difficulty in resolving airport noise and capacity issues exists because of the lack of clear accountability and the frequent absence of cooperative planning and leadership in the private and public sectors.[270] But, changes in the status quo should begin with a consideration of policy principles[271] around which consensus and understanding can grow. The following policy principles serve such a beginning.[272]

---

268. DOT/FAA, AIRPORT LAND BANKING (1977) (noting the broad powers and responsibility of local governments to decide the need for land acquisition and control).

269. There have been recent FAA efforts to make more land available for airport development or prevent the loss of airport land to non-aviation uses. *E.g.* McGarry, *FAA Presses for Aviation Use of Land Near Van Nuys Airport*, L.A. Times, Feb. 22, 1985, § 2, at 6, col. 5; Letter from James Motley, FAA, to Defense Secretary's Commission, Nov. 10, 1988 Base Realignment and Closure. The FAA missed an opportunity to have airport needs listed among alternative uses for federal land in a recent executive order. Exec. Order No. 12,682, 3 C.F.R. 229 (1990).

270. For an overview of accountability and planning in government see C. JONES, AN INTRODUCTION TO THE STUDY OF PUBLIC POLICY (2d ed. 1977); D. ROSENBLOOM & D. GOLDMAN, PUBLIC ADMINISTRATION: UNDERSTANDING MANAGEMENT, POLITICS, AND LAW IN THE PUBLIC SECTOR (1986).

271. A public policy problem is a political condition that has not yet found a standard. The resolution of the problem begins with an initial stipulation of those values to be served. Using policy principles, decisions can be both made and justified. Of course, development of such principles is a slow, incremental process. D. ROSENBLOOM & D. GOLDMAN, *supra* note 270, at 290-96 (1986); Anderson, *The Place of Principles in Policy Analysis*, 73 AM. POL. SCI. REV. 711 (1979), Diggins & Kann, *Authority in America: The Crisis of Legitimacy*, in PROBLEM OF AUTHORITY IN AMERICA 3 (J. Diggins & M. Kann ed. 1981); Etzioni, *Mixed-Scanning: A "Third" Approach to Decision-Making*, 27 PUB. ADMIN. REV. 385 (1967); Lindbloom, *The Science of "Muddling Through,"* 19 PUB. ADMIN. REV. 79 (1959); Schauer, *Formalism*, 97 YALE L.J. 509 (1988).

272. Nearly all previous studies of the airport noise and airport capacity issues have recommended specific actions to be taken, without considering whether such actions were consistent with more general policy principles. Failure to consider and resolve the relationship between policies and actions typically undermine the usefulness of such studies. Examples of notable reports which recommended specific courses of action include: PRESIDENT'S AIRPORT COMMISSION, THE AIRPORT AND ITS NEIGHBORS (1952) (Doolittle Report); INDUSTRY TASK FORCE ON AIRPORT CAPACITY IMPROVEMENT AND DELAY REDUCTION, REPORT OF THE WORKING GROUP ON AIRCRAFT NOISE/AIRPORT CAPACITY (1987).

One transportation policy commission reviewed dozens of transportation studies and reports, and found that they nearly all shared the following weaknesses:

- Proposals focused more on commercial carrier trends and problems, and little on users, consumers, and tax payers.
- Political realities and externalities were generally ignored.
- Specific trade-offs between competing interests were seldom addressed.
- Prioritization of needs was typically absent.
- Planning was seldom comprehensive or long range.

POLICY PRINCIPLE ONE: *SINCE AIRPORT PROBLEMS CANNOT BE SOLVED BY A SINGLE INSTITUTION OR GOVERNMENT AUTHORITY, ALL AFFECTED GROUPS MUST ACTIVELY COOPERATE IN FORMULATING AND SUPPORTING ACTIONS TO INCREASE FAIRNESS, EFFICIENCY, AND ACCOUNTABILITY*

It has been said that the problems associated with airports in the United States are largely institutional[273] rather than technical or economic. Even though aviation activity produces benefits for everyone, our federalism[274] system has failed to promote clear accountability for the problems of fairness and efficiency associated with such benefits.[275]

NATIONAL TRANSPORTATION POLICY STUDY COMMISSION, CURRENT TRANSPORTATION ISSUES IN THE UNITED STATES: VOLUME TWO, 27-29 (1978).

A good example of the type of policy principles development attempted here, is CONGRESSIONAL BUDGET OFFICE, FEDERAL POLICIES FOR INFRASTRUCTURE MANAGEMENT (1986).

273. Much of the solution to the problem of aircraft/airport noise is institutional rather than technological. A substantial portion of the problem can be solved if the parties involved—aircraft manufacturers, air carriers, pilots, airports, local communities and various agencies of the federal government—would work cooperatively. EPA, TOWARD A NATIONAL STRATEGY FOR NOISE CONTROL 45 (1977).

274. We live in a nation with a system of federalism based on a sharing of power and responsibility, with the various governments working toward shared goals. One author has characterized our system as "row boat federalism," which describes the federal system in terms of people in a boat. T. SANFORD, STORM OVER THE STATES 97 (1967). The governments are all in the same boat, tossed by the same waves, and dependent on each other's paddles. When anyone fails to row, they all move more slowly, and the waves become more dangerous for all. In row boat federalism, the participants might agree on some things, notably the desire to remain afloat (that is, to survive), they may or may not agree on their destination, who should sit where, or how the burdens should be divided. Cooperation is possible, but so is conflict.

One problem in "row boat federalism" is that of government accountability. If all levels of government participate in a program that fails, how do we know who deserves the blame? Who should receive credit for a success? Sharing of responsibilities creates enormous opportunities for scapegoating.

On the positive side, shared responsibility can lead to cooperative action. This is especially true if officials at each level actually *share* responsibility (are liable) which gives them an incentive to keep an eye on officials at other levels to avoid being blamed for failure.

From the citizen's perspective, most people have little interest in abstract debates over which level of government should be responsible for a given task. What most people care about is getting the policies they want. Of course, those seeking a particular result may argue for a certain level of government's control of an issue which most benefits their interest. But, they enter the picture not as political philosophers or students of federalism theory, but as practical oriented folks.

See T. DYE, AMERICAN FEDERALISM: COMPETITION AMONG GOVERNMENTS (1990); T. ANTON, AMERICAN FEDERALISM AND PUBLIC POLICY (1989); M. GRODZINS, THE AMERICAN SYSTEM (1966); NAT'L GOVERNORS ASS'N, POLICY POSITIONS: 1988-89, 1-5 (1989); D. NICE, FEDERALISM: THE POLITICS OF INTERGOVERNMENTAL RELATIONS (1987); P. PETERSON, B. RABE, & K. WONG, WHEN FEDERALISM WORKS (1986); Beer, *Federalism, Nationalism, and Democracy in America*, 72 AM. POL. SCI. REV. 9 (1978); Keller, *The Cycles of Federalism*, GOVERNING, Oct. 1988, at 52; Wright, *Federalism, Intergovernmental Relations, and Intergovernmental Management*, 50 PUB. ADMIN. REV. 168 (1990).

275. Technology cannot resolve conflicts over values. Airports are a policy problem because

What is needed is a new process which limits such incoherence[276] and enhances participation and accountability among all.[277] As a minimum that approach should incorporate planning procedures which include the following:[278]

- There must be an evaluation whether any private or public interests are regularly absent from local, regional, state, or national airport planning, a determination of the cause of such absence, and the creation of incentives for their participation.
- There should be an effort, open to public scrutiny, to define the costs and benefits of various airport noise and airport capacity actions.

---

the consensus favoring airport development has been shattered. Technology may alleviate some pressures even with a resumption of growth, but those who want to anticipate demand must, now, either rebuild consensus by addressing problems associated with institutional structure, participation, and equity, or persist in continuous conflict. There are many options to explore, but they all evoke complex philosophical problems which, in the absence of consensus, cannot be avoided. Feldman, *Air Transportation Infrastructure as a Problem of Public Policy*, in CURRENT ISSUES IN TRANSPORTATION POLICY 17 (A. Altshuler ed. 1979).

276. Local government sponsorship of airports can cause certain inefficiencies in aviation. Such inefficiencies are more likely to occur because: the jurisdiction of the local government is not large enough to enable the benefits of the airport to be consumed primarily within the jurisdiction; the local government is not large enough to permit the realization of economies of scale; the unit of government should be responsible for a sufficient number of functions so that it provides a forum for resolution of conflicting interests, with significant opportunities to balance needs and resources. Zimmerman, *Solving Local Government Problems by Pragmatic Action*, 12 CURRENT MUN. PROBS. 39 (1985).

277. Many still remain optimistic that such cross-government cooperation is achievable in the United States, which has a history of citizens working together to solve difficult economic and social challenges. W. ZELINSKY, NATION INTO STATE (1988). In such an effort, the FAA would be more of a gardener, understanding and rechanneling natural forces for a more productive effort, than an engineer. The challenge is to get those with distinct interests to accept the call for consensus as an opportunity, rather than a threat. *See* Flynn, *The Effects of Environmental Characteristics on the Institutionalization of Public Transportation*, TRANSP. J., Spring, 1987, at 30; Jackson & Dutton, *Discerning Threats and Opportunities*, 33 ADMIN. SCI. Q. 370 (1988); Newland, *Shared Responsibility*, THE BUREAUCRAT, Spring 1989, at 37.

278. L. SUSSKIND & J. CRUIKSHANK, BREAKING THE IMPASSE: CONSENSUAL APPROACHES TO RESOLVING PUBLIC DISPUTES (1987); Forester, *Planning in the Face of Conflict*, 57 J. AM. PLAN. ADMIN. 303 (1987); Hoyt, *Airport Action Groups*, AIRPORT SERVICES, Nov. 1989, at 6; Kamieniecki, O'Brien & Clarke, *Environmental Policy and Aspects of Intergovernmental Relations*, in INTERGOVERNMENTAL RELATIONS AND PUBLIC POLICY 49 (J. Benton & D. Morgan eds. 1986); Luban, *Bargaining and Compromise: Recent Work on Negotiation and Informal Justice*, 14 PHIL. & PUB. AFF. 397 (1985); Mahler, *Structured Decision Making in Public Organizations*, 47 PUB. ADMIN. REV. 336 (1987); McGrath, *Groups and the Innovation Process*, in INNOVATION IN THE PUBLIC SECTOR 63 (R. Merritt & A. Merritt eds. 1985); Sabatier & Peckey, *Incorporating Multiple Actors and Guidance Instruments into Models of Regulatory Policymaking: An Advocacy Coalition Framework*, 19 ADMIN. & SOC'Y 236 (1987); Stephenson & Pops, *Conflict Resolution Methods and the Policy Process*, 49 PUB. ADMIN. REV. 463 (1989); Weiss, *Pathways to Cooperation Among Public Agencies*, 7 J. POL'Y ANALYSIS & MGMT. 94 (1987); K. Johnson, Toward Mediation: An Examination of Consensus-Building Techniques Applied to the Aircraft Noise and Airport Access Dilemma (1989) (unpublished paper available from the Office of Airport Planning and Programming, FAA Headquarters).

- Consideration should be given to initiatives which increase public education and dispute resolution.
- There must be a change in our system so the federal government, local governments with land use control responsibilities, and the aircraft operators are mutually accountable with airport proprietors for the planning and implementation of airport decisions.

POLICY PRINCIPLE TWO: *SINCE AIRPORTS IN THE UNITED STATES OPERATE UNDER A CITIZEN FRANCHISE REQUIRING PUBLIC CONFIDENCE, ALL AIRPORT DECISION MAKERS MUST ACCOUNT FOR PUBLIC CONCERNS IN PLANNING AND IMPLEMENTATION*

Airports have no vested rights. A successful airport development project must not only be analytically sound, but *must* earn public support.[279] Consequently, airport and airspace decision makers have a responsibility to communicate with elected officials and to foster public dialogue and support. Potential public acceptance is dependent upon whether the affected community understands and accepts the need for the development or change; receives complete, truthful, and unbiased information about the impacts; and recognizes that public concerns have been considered adequately and fairly. The only way to ensure these conditions is by designing a program to achieve them.[280] Included

279. G. DOWNS & P. LARKEY, THE SEARCH FOR GOVERNMENT EFFICIENCY 135-36 (1986) (advocating significant government resources to deal with the "chaotic, often frenzied" world of public interest and political support).

Public participation in important government decisions is consistent with the constitutional values of the Nation, and is in close alliance with civil and national pride. Lane, *Individualism, Civic Virtue, and Public Administration*, 20 ADMIN. & SOC'Y 30 (1988); Long, *The Citizenships: Local, State, and National*, 23 URB. AFF. Q. 4 (1987); Nigro & Richardson, *Self-Interest Properly Understood: The American Character and Public Administration*, 19 ADMIN. & SOC'Y 157 (1987). When government is unresponsive to the right of citizen participation, communities may react by expanding the focus of the debate beyond the specific issue. J. LOGAN & H. MOLOTCH, URBAN FORTUNES: THE POLITICAL ECONOMY OF PLACE 134 (1987).

280. L. COFFMAN, PUBLIC-SECTOR MARKETING (1986); M. O'HARE, L. BACOW & D. SANDERSON, FACILITY SITING AND PUBLIC OPPOSITION 159-63 (1983); PUBLIC INVOLVEMENT AND SOCIAL IMPACT ASSESSMENT (G. Daneke, M. Garcia & J. Priscoli eds. 1983); Bremer, *Burbank Airport: Better PR Helps Cut Noise Complaints*, AIRPORT SERVICES, Mar. 1986, at 9; Brion, *An Essay on LULU, NIMBY, and the Problem of Distributive Justice*, 15 B.C. ENVTL. AFF. L. REV. 437, 497-502 (1988); Checkoway, *Building Citizen Support for Planning at the Community Level*, in INTERDISCIPLINARY PLANNING: A PERSPECTIVE FOR THE FUTURE 136 (M. Dluhy & K. Chen eds. 1986); Ducsik, *Power Plants and People: A Profile of Electric Utility Initiatives in Cooperative Planning*, 50 J. AM. PLAN. ADMIN. 162 (1984); Giese, *Listening to the Community: New Rules for Successful Development*, URBAN LAND, Mar. 1988, at 12; Hart, *Public Relations for Public Approval*, URBAN LAND, Feb. 1986, at 19; Laverty, *Assessing and Affecting Community Power*, 7 MUN. MGMT. 54 (1984); Michaels, *More Public Consultation on Airport Plans*, AIRPORT F., Feb. 1978, at 25; Susskind, *Citizen Participation and Consensus Building in Land Use Planning*, in THE LAND USE POLICY DEBATE IN THE UNITED STATES 183 (J. de Neufville ed. 1981). The call for better community support goes back many years. Haire, *Airport Relations with the Community*, AIRPORT & AIR

among the hallmarks of a quality public acceptance program are:

- purposeful[281] efforts to educate the public and elected officials in the need for and the benefits of the project;
- willingness to define and discuss the aviation activity associated with the proposal and its possible impacts on various interests in the community;
- significant time and resources devoted to learning about the community values and objectives[282] impacted by the project; and
- a demonstrated commitment to the development of mitigation measures appropriate to the situation.[283]

POLICY PRINCIPLE THREE: *AVIATION INDUSTRY GROUPS AND VARIOUS LEVELS OF GOVERNMENT ARE RESPONSIBLE FOR RESOLVING DISPUTES OVER AIRPORT NOISE, INCLUDING PROVIDING "JUST COMPENSATION" TO PROPERTY OWNERS AND BALANCING THE MANY GENERAL WELFARE NEEDS*

Near airports, quiet is a scarce resource which causes fierce competition. By-in-large the aircraft operators, the federal government, airports, and their neighbors approach this problem with a narrow perspective, rather than accepting a balanced solution.[284] Frequent reactions from these diverse parties include:

- the spending of considerable time and effort articulating one side's needs and interests;
- the reluctance to learn about the plight of the other side, and their concerns;
- the rationalizing away of any injustice; and
- the strict adherence to procedural requirements.

Depending on a variety of factors, this system of narrow concern often produces lopsided results: where either many airport neighbors go

---

CARRIERS, Jan. 1949, at 26. The "father" of community involvement with major public works projects was the first chairman of the Tennessee Valley Authority, Arthur Ernest Morgan. A. MORGAN, THE SMALL COMMUNITY, FOUNDATION OF DEMOCRATIC LIFE (1942).

281. A key to any significant change in policy is the creation of political discourse on the issue of concern. While such discourse may occur as a result of a crisis, such as a major aircraft accident, government agencies can purposefully interject issues into the political arena and encourage public attention to the problem. Forester, *Questioning and Organizing Attention: Toward a Critical Theory of Planning and Administrative Practice*, 13 ADMIN. & SOC'Y 161 (1981).

282. A commonly cited weakness of national public works planning is the absence of appreciation for local "symbols of politics." Successful planning which impacts community land must dedicate adequate resources in recognizing and accommodating local values, objectives, and traditions. Trilling, *Land Use Policy and the Symbolic Politics of Environmental Conflict*, in THE LAND USE POLICY DEBATE IN THE UNITED STATES 91 (J. de Neufville ed. 1981).

283. Of course, public officials have an obligation to clarify government decisions so that formation of false private land use expectations is minimized. Beatley, *The Role of Expectations and Promises in Land Use Decisionmaking*, 22 POL'Y SCI. 27 (1989).

284. *See generally* DeCarufel, *The Allocation and Acquisition of Resources in Times of Scarcity*, in THE JUSTICE MOTIVE IN SOCIAL BEHAVIOR: ADAPTING TO TIMES OF SCARCITY AND CHANGE 317 (M. Lerner & S. Lerner eds. 1981).

uncompensated for, or must live with, high levels of aircraft noise; or the airport and the national air transport system must accept severe restrictions on operations in the face of growing community, regional, and national need for aviation services. Important to reducing such imbalance are at least two principles of good government in the United States.

First of these principles is the responsibility of government and the private sector to promote the general welfare of its citizens. At the community level this general welfare is commonly known as quality of life.[285] Such quality of life includes access to transportation, opportunities for education, control of crime, opportunities for employment, availability of recreational facilities, clean air and water, quiet, and so forth. But, the achievement of community quality of life is often pitted against the impact of community choices on the general welfare of other communities, the region, state, and Nation. In order to allocate limited resources to achieve the optimum general welfare under specific circumstances, public and private interests at all levels of government must participate in cooperative planning and should accept less than a full satisfaction of self-interest.

The second principle is reflected in the Just Compensation Clause[286] of the United States Constitution. The spirit of that principle is that disproportionately placed burdens on private property will be avoided.[287] While the exact formula for such compensation continues to be debated, public and private sector interests should strive to compensate noise impacted property owners when fairness dictates.[288] Indirectly such compensation may also reduce the level of political controversy associated with airport development projects and airport operations,[289] and may cause more ef-

---

285. Myers, *Building Knowledge About Quality of Life for Urban Planning*, 54 J. AM. PLAN. ADMIN. 347 (1988).

286. U.S. CONST. amend V.

287. *See* Kmiec, *The Original Understanding of the Taking Clause is Neither Weak or Obtuse*, 88 COLUM. L. REV. 1630 (1988); Peterson, *The Takings Clause: In Search of Underlying Principles*, 77 CALIF. L. REV. 1229 (1989).

288. Within the last two decades is has become more common to compensate for environmental pollution injuries. Muskie, *Reflections on a Quarter Century of Environmental Activism*, 18 ENVTL. L. REP. (ENVTL. L. INST.) 10081 (1988).

289. Bacow & Milkey, *Overcoming Local Opposition to Hazardous Waste Facilities: The Massachusetts Approach*, 6 HARV. ENVTL. L. REV. 265 (1982); O'Hare, *Not on My Block, You Don't: Facility Siting and The Strategic Importance of Compensation*, 25 PUB. POL'Y 407 (1977). Notwithstanding the advantage of negotiated compensation, public works project proponents seldom use this tactic. Reasons for such reluctance include:

- project proponents usually underestimate the power and determination of the opposition;
- proponents are inexperienced in packaging alternatives in ways that invite compromise;
- proponents may have a difficult time determining with whom they should negotiate; and
- the act of offering to compensate is perceived as inviting a flood of interests which will seek compensation and which will render the project too costly.

ficient decision making about airports and airways.[290]

In order to further these two principles it may be necessary to adopt a new statutory or regulatory approach. The preparation of that new approach, should begin with a consideration of these guides:[291]

- Self-interest should be discouraged and parties should be persuaded to negotiate, which includes feedback and interaction.[292]
- The allocation method should consider any reasonable alternative to eliminate or reduce the noise impacts without eliminating the proposed project or operation.
- Benefits transferred to private interests or neighborhoods because of disproportionate burdens may appropriately include alternatives to money compensation.
- Compensating private interests which are precluded from recovering by statutes of limitations may, nevertheless, be required as a matter of fairness.[293]
- Quality of life in the impacted community should always be considered.[294]
- Adequate resources should be provided to determine the nature and extent of the noise impacts on airport neighbors.
- The amount of the existing capital investment in airport and related facilities, along with the length of operation of the airport, should be considered.
- The importance of the proposed project or operation to the community, state, and Nation should be clearly defined.
- Private interests within the areas of highest noise levels, and with exposure to more frequent aircraft activity, may have a greater justification to partici-

---

M. O'HARE, L. BACOW & D. SANDERSON, FACILITY SITING AND PUBLIC OPPOSITION 91-93 (1983).

290. This "better calculations" theory of public finance suggests that compensation for social impacts encourages government agencies to balance more carefully the costs of their actions against the benefits. Tullock, *Achieving Regulation: The Public Noise Perspective*, REGULATION, Nov./Dec. 1978, at 50.

291. Lesbirel, *The Political Economy of Project Delay*, 20 POL'Y SCI. 153 (1987); Lipsker & Heldt, *Regulatory Takings: A Contract Approach*, 16 FORDHAM URB. L.J. 195 (1988); O'Hare & Sanderson, *Fair Compensation and the Boomtown Problem*, 14 URB. L. REV. 101 (1977); Regens & Rycroft, *Measuring Equity in Regulatory Policy Implementation*, 46 PUB. POL'Y REV. 423 (1986); Sigmon, *Achieving a Negotiated Compensation Agreement in Siting: The MRS Case*, 6 J. POL'Y ANALYSIS & MGMT. 170 (1987); Skaburskis, *Criteria for Compensating for the Impacts of Large Projects*, 7 J. POL'Y ANALYSIS & MGMT. 669 (1988); Van Alstyne, *Just Compensation of Intangible Detriment*, 16 UCLA L. REV. 491, 535-43 (1969). Without negotiated compensation allocation of scarce resources is resolved through the use of one of the following approaches: right of first-on-the-scene; economic efficiency; lottery; priority of needs; maximizing the overall benefit to all interests. Dragon, *Externalities, Property Rights and Power*, 17 J. ECON. ISSUES 667 (1983); Greenberg, *The Justice of Distributing Scarce and Abundant Resources*, in THE JUSTICE MOTIVE IN SOCIAL BEHAVIOR: ADAPTING TO TIMES OF SCARCITY AND CHANGE 289 (M. Lerner & S. Lerner eds. 1981).

292. Brookshire & Coursey, *Measuring the Value of a Public Good: An Empirical Comparison of Elicitation Procedures*, 77 AM. ECON. REV. 554 (1987).

293. *See* Ball, *The Problems and Prospects of Fashioning a Remedy for Radiation Injury Plaintiffs in Federal District Court: Examining Allen v. United States*, 1985 UTAH L. REV. 267.

294. Myers, *Community-relevant Measurement of Quality of Life: A Focus on Local Trends*, 23 URB. AFF. Q. 108 (1987).

pate in negotiations, and obtain relief.[295]

- The extent to which any interest has materially relied on any existing institutional arrangements should be considered.
- Any advantage which an interest obtains because of its proximity to the airport should be considered in determining net compensation.
- Recovery may be barred if the alleged injury was the loss of value from speculative future land development.
- If uncertainties make it difficult for a landowner to calculate the value of any injury, those responsible for the aviation activity must bear some, if not all, of the burden of the uncertainty.[296]

POLICY PRINCIPLE FOUR: *THERE ARE CERTAIN AIRPORT-RELATED ISSUES OF NATIONAL CONCERN WHICH MUST BE CLEARLY DEFINED AND ACCEPTED*

The United States has evolved into what some believe is a true nation-state,[297] with potential to solve complex economic, social, and physical environment problems. Such potential is more readily achieved, however, when public and private sector interests act "responsibly,"[298] meaning purposefully to achieve objectives in the public interest.

Unfortunately, in the area of airport noise and airport capacity such public interests have either not been well defined or been too vague to promote accountability. Some of the public debate concerning airports and airways ought to focus on the root national general welfare issues, with a view toward better definition or clarity. Among the more important questions of national public concern associated with airports are these:

- Assuming that both safety and noise are serious externalities of aviation activity, why does safety attract greater federal interest and resources than

---

295. Also, the ability of the private interest to reasonably avoid the impacts may be considered. Blume & Rubenfeld, *Compensation for Takings: An Economic Analysis*, 10 RES. L. & ECON. 53 (1987).

296. D. LAYCOCK, MODERN AMERICAN REMEDIES 176-77 (1985).

297. W. ZELINSKY, NATION INTO STATE (1988); BEER, THE IDEA OF THE NATION IN AMERICAN INTERGOVERNMENTAL RELATIONS 249 (L. O'Toole ed. 1985).

298. Factors in defining "responsibility" in achieving public interests include:

- individuals who make important decisions affecting the public are accountable to somebody who has the power to veto decisions or remove the decisionmakers from authority;
- decisionmakers operate under special constitutional, statutory, or regulatory charters which contain specific objective criteria useful in evaluating actions and performance;
- individuals or institutions with special knowledge useful in furthering a public interest are charged with sharing such knowledge with others; and
- public and private sector actions are explicable, meaning susceptible to rational explanation, conditioned upon attempts to obtain the relevant facts, and upon consideration of the consequences.

Of course, a public or private sector institution charged with a public interest must control sufficient resources to plan and implement required actions. H. SPIRO, RESPONSIBILITY IN GOVERNMENT (1969); Ingraham & Ban, *Models of Public Management*, 46 PUB. ADMIN. REV. 152 (1986); Rose-Ackerman, *Progressive Law and Economics: And The New Administrative Law*, 98 YALE L.J. 341 (1988).

does noise?[299] Is it in the Nation's best interest for the federal government to shoulder more of the responsibility in solving the airport noise problem?

- Should scarce federal resources be spent on airport infrastructure without a clear demonstration of how that expenditure will increase system capacity? If there are competing national interests which may override the requirement for system capacity, what are they and are they clearly defined?[300]
- Are the long term interests of aviation better served by the present improvisation in airport development, or is a more systematic and analytical method needed? Why?[301]
- When does the federal interest under the Commerce Clause of the United States lead to the preemption of airport use restrictions?[302]

---

299. Control of externalities is considered a legitimate role of government, but one that is not always successful. *See* Shepsle & Weingast, *Political Solutions to Market Problems*, 78 AM. POL. SCI. REV. 417 (1984). When the externalities cross state boundaries, such as exporting noise and safety problems outside a state, a stronger federal role may be required. *See* Brilmaker, *Shaping and Sharing in Democratic Theory: Towards a Political Philosophy of Interstate Equality*, 15 FLA. ST. U.L. REV. 389 (1987); Ruhl, *Interstate Pollution Control and Resource Development Planning: Outmoded Approaches or Outmoded Politics?*, 28 NAT. RESOURCES J. 293 (1988).

300. Of course, system capacity increases may not be the only legitimate cause for federal expenditures at airports. But, the purposes ought to be more clearly defined and prioritized. *See* Bodde, *The Federal Financing of Large-Scale Engineering Projects*, 10 TECH. SOC'Y 5 (1988).

Principles justifying a federal role in regulating airports and the aviation industry include:

- the exercise of enumerated constitutional powers such as the Commerce Clause or Just Compensation Clause;
- the need for federal involvement because of the magnitude of the fiscal problem;
- the need to address the multistate dimensions of the aviation activity; or
- the need for national uniformity in the face of discriminatory, unfair, or inefficient local rules.

ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS, REGULATORY FEDERALISM 258-59 (1984); S. BREYER, REGULATION AND ITS REFORM 191-93 (1982); CONGRESSIONAL BUDGET OFFICE, THE FEDERAL GOVERNMENT IN A FEDERAL SYSTEM: CURRENT INTERGOVERNMENTAL PROGRAMS AND OPTIONS FOR CHANGE (1983); CONGRESSIONAL BUDGET OFFICE, PUBLIC WORKS INFRASTRUCTURE: POLICY CONSIDERATIONS FOR THE 1980S, NEW DIRECTIONS FOR THE NATION'S PUBLIC WORKS (1988); NAT'L COUNCIL ON PUBLIC WORKS IMPROVEMENT, FRAGILE FOUNDATIONS: A REPORT ON AMERICA'S PUBLIC WORKS 84 (1988).

301. The advantages of long range strategic planning could be significant. J. OLSON & D. EADIE, THE GAME PLAN: GOVERNANCE WITH FORESIGHT (1982); TRANSPORTATION RESEARCH BOARD, FUTURE DEVELOPMENT OF THE U.S. AIRPORT NETWORK 21-23 (1988); Eadie, *Putting a Powerful Tool to Practical Use: The Application of Strategic Planning in the Public Sector*, 43 PUB. ADMIN. REV. 447 (1983); Grewer, Marshall & O'Toole, *Participative Planning for a Public Service*, LONG RANGE PLAN., Feb. 1989, at 110.

302. The constitutional restraint upon state control of commerce found in the Commerce Clause was a reasoned and reasonable reaction to the Nation's near disastrous experience under the Articles of Confederation, when commercial anarchy reigned. Since its adoption, however, the definition of what is commerce, and how to regulate it have been disputed. The powers of the Commerce Clause were first extensively used during Theodore Roosevelt's era of "New Nationalism." During those years, the federal Commerce Power was used like a federal police power, to attack health and social problems considered harmful to the public. This interpretation of the Commerce Clause was further expanded and institutionalized between 1937 and 1942

- What should be the role of airport activity forecasting?[303] How much resource should be dedicated to this effort?

POLICY PRINCIPLE FIVE: *ASSUMING THAT THE FAILURE TO CONTROL INCOMPATIBLE LAND USES ON AND IN THE VICINITY OF AIRPORTS HARMS BOTH PUBLIC AND PRIVATE INTERESTS, SUBSTANTIVE AND PROCEDURAL STANDARDS FOR AIRPORT AREA LAND USE PLANNING CAN REDUCE INCONSISTENCY, INEQUITY, AND INEFFICIENCY*

A pervasive, complex, and costly problem associated with airport development and operations is the incompatible use of land on and in the vicinity of airports. These highly desirable properties are the focus of many local, regional, state, and national initiatives, both public and private. In many cases the diverse interests in airport area real property go uncoordinated leading to inconsistent, irrational, inequitable, and ineffi-

---

when the United States Supreme Court decided a series of cases sanctioning almost limitless congressional power.

But, during the last decade of national politics calling for reduced federal government the exercise of authority under the Commerce Clause has waned. *See* ACADEMY FOR STATE AND LOCAL GOVERNMENT, PREEMPTION: DRAWING THE LINE 40-43, 61-63 (1986) (discussing Reagan Administration decisions concerning the federal role in dealing with problems of non-uniform local/state regulations affecting weight and length of trucks on interstate highways, and regulating the transportation of hazardous materials).

303. *See* W. ASCHER & W. OVERHOLT, STRATEGIC PLANNING AND FORECASTING (1983).

A recent book discusses the "lessons learned" by those who have sought to forecast future events and understand social trends:

- There is an extraordinary capacity of the human mind and spirit to master complex problems, which we are a long way from having exhausted.
- From time to time a leader steps forward and has a significant impact on society.
- Predicting the future requires a careful interpretation of the present.
- People's perceptions of reality are important and should not be ignored.
- The use of words provides many traps since meanings evolve continually.
- Interdisciplinary teamwork involving mutual respect and trust is necessary to solve complex problems and to achieve synergistic results.
- There is a public-private nexus whenever major, successful social problems are achieved.
- Doomsday scenarios, erroneous forecasts, and outrageous statements attract the media and conference-goers.
- It takes extra effort to avoid accepting, using, and promoting irrelevant information.

WHAT I HAVE LEARNED: THINKING ABOUT THE FUTURE THEN AND NOW (M. Marien & L. Jennings eds. 1987).

In 1988 one writer suggested that future economic growth in the United States would depend on the nation's ability to deal with the following issues: termination of the cold war; defining policies for information technology and its impacts; the continuation of inequality among citizens; lawyerization of society; problems of the aging society and the medical-industrial complex; drug abuse; new waves of immigrants; deteriorating infrastructure; fragmentation of vested interests; global environmental degradation; AIDS and other diseases; absence of long-rang planning. Linstone, *Issues for America: An Agenda of Problems and Opportunities*, 34 TECH. FORECASTING & SOCIAL CHANGE 203 (1988). *See also* Golden, *Cheer Up, Things Could Be Worse: Problems and Opportunities for the Decades Ahead*, 11 TECH. SOC'Y 297 (1989) (adding to the list of issues: literacy, changing roles of women, single-parent households, energy-shortages).

cient results.[304] Such decision making affects not only the community and its airport, but has long range, far reaching impacts on the region, state, and the Nation.

Fortunately, similar problems have been identified and are being addressed by the federal government, states,[305] and local governments in other contexts: floodplains,[306] coastal zones,[307] land surrounding nuclear plants,[308] and so forth.[309] Such recent experience, along with the lessons learned under the FAA FAR Part 150 Program, could form the basis for a national debate concerning airport vicinity land use planning and control.[310] That debate should consider several important issues

304. The topic of land use control is a very emotional subject for many people. In the United States concepts of real property rights are tied very closely to the Nation's perceptions of individualism. Regulation of private property by local governments is often perceived as invading an important inalienable right. But, in practice both public and private landowners may and often do use their property in ways that harm others. While such injurious uses may not be the result of malicious intent, their continuation will ultimately cause the landowner's rights to become illusory.

In the last few decades advances in science and information gathering have made it possible to reduce the harmful effects of land uses, and to increase the capacity of the existing physical space in which we live, work, and play. But, these advances have yet to be extensively used in solving land use disputes. Many claim that the Nation is overdue for a land policy which reflects the practical problems, the available solutions, and the needs of future generations.

See Caldwell, *Land and the Law: Problems in Legal Philosophy*, 1986 U. ILL. L. REV. 319; Healey & Barrett, *Land Policy: Towards a Research Agenda* in LAND POLICY: PROBLEMS AND ALTERNATIVES 1 (S. Barrett & P. Healey eds. 1985).

305. At the forefront of land use compatibility planning is the State of Florida. DeGrove, *Critical Area Programs in Florida: Creative Balancing of Growth and the Environment*, 34 WASH. U. J. URB. & CONTEMP. L. 51 (1988); DeGrove & Stroud, *New Developments and Future Trends in Local Government Comprehensive Planning*, 17 STETSON L. REV. 573 (1988).

Planning as a function of government is recent in modern history. During its brief existence it has experienced a dizzying roller coaster ride of public acceptance and rejection. *See* J. FRIEDMANN, PLANNING IN THE PUBLIC DOMAIN (1987).

306. J. KUSLER & T. LEE, REGULATIONS FOR FLOODPLAINS (1972) (American Society of Planning Officials, Planning Advisory Service Report No. 277); J. KUSLER, REGULATION OF FLOOD HAZARD AREAS TO REDUCE FLOOD LOSSES (1982); R. PLATT, INTERGOVERNMENTAL MANAGEMENT OF FLOODPLAINS (1980); R. Burby, *Cities Under Water: A Comparative Evaluation of Ten Cities' Efforts to Manage Floodplain Land Use* (Program in Environment and Behavior, University of Colorado, Monograph No. 47) (1988); Bollens, *Public Policy and Land Conversion: Lessening Urban Growth*, GROWTH & CHANGE, Winter, 1990, at 40.

307. *See* Born & Miller, *Assessing Networked Coastal Zone Management Programs*, 16 COASTAL MGMT. 229 (1988); Fischer, *California's Coastal Program*, 51 J. AM. PLAN. A. 312 (1985); Healy & Zinn, *Environment and Development Conflicts in Coastal Zone Management*, 51 J. AM. PLAN. A. 299 (1985); Walters, *Special Area Management Planning in Coastal Areas*, in MANAGING LAND-USE CONFLICTS (D. Brower & D. Carol eds. 1987).

308. Pearlman & Waite, *Controlling Land Use and Population Growth Near Nuclear Power Plants*, 27 WASH. U.J. URB. & CONTEMP. L. 9 (1984).

309. *E.g.*, J. KUSLER, REGULATING SENSITIVE LANDS (1980).

310. Several important factors in developing a successful airport vicinity land use plan are found in A. HARRIS, R. MILLER & J. MAHONEY, A GUIDANCE DOCUMENT ON AIRPORT NOISE CONTROL 109-25 (FAA REPORT FAA-EE-80-37 (1980)).

Of course, the frontier of artificial intelligence may provide important support for decision

about private and public land ownership, and land policy.

- How can public confidence in airport vicinity land use planning and control be achieved?[311]
- What information is needed to effectively plan and control uses on and near airports, and how would such information be collected and managed?[312]
- To what extent should bargaining between competing interests be promoted?[313]
- Is there a legitimate role for government in purchasing and redeveloping property near airports?[314]
- Who should provide the resources necessary for successful airport vicinity land use planning and control?

POLICY PRINCIPLE SIX: *PUBLIC ACQUISITION AND EFFECTIVE MANAGEMENT OF AIRPORT REAL PROPERTY INTERESTS ARE ESSENTIAL FOR THE LONG RANGE NEEDS OF AVIATION IN THE UNITED STATES*

The public ownership and management of real estate[315] have a profound affect on the institutional and policy choices available to solve

---

makers. KOCHEN & BARR, *How Rational Can Planning Be: Toward an Informational Processing Model of Planning*, in INTERDISCIPLINARY PLANNING: A PERSPECTIVE FOR THE FUTURE 29 (M. Dluhy & K. Chen eds. 1986). *See also* TRANSP. RESEARCH BOARD, EXPERT SYSTEMS IN TRANSPORTATION (Circular No. 1187) (1988); Han & Kim, *Can Expert Systems Help With Planning?*, 55 J. AM. PLAN. A. 296 (1989).

311. *See* R. BARLOWE, LAND RESOURCE ECONOMICS 481-85 (4th ed. 1986).

Many believe that more faithful compliance with the National Environmental Policy Act would promote greater coordination, and compatible land uses. Of great value is NEPA "scoping" where the sponsors of a project, early in planning, test the waters to determine the magnitude and diversity of negative impacts, and the likelihood of mitigation alternatives. In private sector planning scoping is known as "risk assessment" and has many advocates. *See* INTEGRATED IMPACT ASSESSMENT (F. Rossini & A. Porter eds. 1983); CONDE, *Risk/Opportunity Assessment*, in 1987 PROCEEDINGS OF THE PROJECT MANAGEMENT INSTITUTE, at 20; Dutton & Jackson, *Categorizing Strategic Issues: Links to Organizational Action*, 12 ACAD. MGMT. REV. 76 (1987); SYKES, *Reducing Neglected Risks on Giant Projects*, in NEW DIMENSIONS OF PROJECT MANAGEMENT 141 (A. Kelley ed. 1982).

312. *See* E. BRIGHT, AIRPORT AREA PLANNING AND IMPLEMENTATION 53-57 (1980); D. RHIND & R. HUDSON, LAND USE 13-125 (1980).

313. Wegner, *Moving Toward the Bargaining Table: Contract Zoning, Development Agreements, and the Theoretical Foundations of Government Land Use Control*, 65 N.C.L. REV. 957 (1987).

314. Redevelopment projects near airports can spur the local economic base, help stabilize employment, and improve community spirit. Also, land is often used more efficiently, and incompatibility with airport operations can be controlled. *See* CITY OF INGLEWOOD, INGLEWOOD NOISE COMPATIBILITY IMPROVEMENT PROJECT: 1988 ANNUAL REPORT (1988). But, the potential for such redevelopment can be limited due to: housing shortages requiring the need to retain existing housing stock; lack of authority or jurisdictional responsibility to purchase the property; strong political opposition; and high costs of relocation and administration.

315. *See* Mandleker, *Public Entrepreneurship: A Legal Primer*, 15 REAL EST. L.J. 3 (1987). The Nature Conservancy provides a notable example of policy flexibility through land ownership. NATURE CONSERVANCY, PRESERVING OUR NATURAL HERITAGE 92-108 (1982).

airport problems. Appropriate exercise of the eminent domain power for future project development, more productive utilization of available public land resources, and acquisition of restrictive easements in land near airports can increase the likelihood of satisfying the long term air transportation requirements.

Unfortunately, too little attention is given to these important matters by any level of government. Taking the lead from some private corporations,[316] government should evaluate the need for and benefits of better real property acquisition and management programs.[317]

POLICY PRINCIPLE SEVEN: *IF LIABILITY FOR INJURY CAUSED BY AIRCRAFT NOISE WAS SHARED BY THOSE PRIVATE AND PUBLIC INTERESTS INVOLVED IN AVIATION ACTIVITY AND AIRPORT VICINITY LAND USE CONTROL, SOME OF THE BARRIERS TO COOPERATIVE AIRPORT DECISION MAKING COULD BE REMOVED*

Under the current rule of law only airport proprietors, not the FAA, nor the air carriers, nor local land use planning agencies, nor any other, are liable for losses suffered by airport neighbors from aviation noise. Interestingly, this sole liability principle has had a profound impact on government and private sector policies toward airports. Airport proprietors point to the hardship of their liability as justification for retaining exclusive control over airport use restrictions.[318] The FAA has carefully avoided using federal authority to resolve disputes arising from aircraft noise, fear-

316. Many successful corporations involve real estate professionals in policy decisionmaking. Johnson, *Designing Corporate Real Estate Policy From the Ground Up*, 33 SITE SELECTION 1483 (1988); Pittman, *Integration of Real Estate into Corporate Strategy*, 34 SITE SELECTION 100 (1989). Often an important factor in corporate takeover planning is an analysis of the target's real estate holdings and real estate management practices. Conway, *Does Your Real Estate Setup Make Your Company a Takeover Target?*, 34 SITE SELECTION 4 (1989).

317. Public agencies responsible for public works projects are finding out how important it is to have capable, well-staffed real estate offices. The following are some considerations:

- Timely completion of capital facilities has become dependent on the success in acquiring the necessary real estate interests.
- Complexity of government regulations involving real estate often mandates the creation of an inter-departmental real property task force with expertise in real estate, environment, contracting, legal, public relations, and operations.
- Land exchanges and public-private ventures in real estate development are among the techniques available to enhance public programs.

AIRPORT OPERATORS COUNCIL INT'L, MARKETING HANDBOOK 88-97 (1989); Holmes, *Airport's Growth Helped by Flexible Lease Management*, AIRPORT SERVICES, Oct. 1987, at 13; THORNTON & MELLUM, *Real Estate Acquisition Process in the Public Sector*, in PROCEEDINGS OF THE PROJECT MANAGEMENT INSTITUTE 373 (1988); ULMER, *Alternatives to the Use of Eminent Domain in Public Project*, in INSTITUTE ON PLANNING, ZONING, AND EMINENT DOMAIN (1988).

318. The reason supporting the airport proprietor's sole liability for noise-related injuries was that airports have the responsibility to acquire the necessary real estate interests to limit noise conflicts. But, there are several factors beyond the control of the airport which have limited the use of real estate acquisition as the principle solution to the problem:

ing the loss of immunity[319] from liability. At least two other non-liable interests, the air carriers and local governments responsible for land use planning and control, have given only peripheral attention to the issue of aircraft noise impacts on citizens.

For two good policy reasons a broader-based liability for aircraft noise pollution injury ought to be considered:

- Airport proprietors whose liability is reduced would be more supportive of national airport system plans.
- There would be greater cooperation among those liable for noise-related injuries in providing the needed resources, information, and attention to resolve conflicts.

Of course, legislation to spread liability should include provisions for just compensation to impacted property owners consistent with Policy Principle Three.

POLICY PRINCIPLE EIGHT: *IMPORTANT ACHIEVEMENTS IN AIRPORT DECISION MAKING WILL NOT OCCUR WITHOUT TALENTED AND COMMITTED LEADERS FROM THE PUBLIC AND PRIVATE SECTOR*

Fortunately there are many capable managers in the public and private sector who understand airport policy in the United States and who work very well at solving problems within their organizations. But the cross-institution issues discussed here may never be resolved unless leaders[320] emerge who capture the attention of the diverse groups impacted by airport decision making, and inspire them to accept greater responsibility.[321]

- The FAA, not the airports, designate flight tracks which determine the areas where real estate interests should be acquired.
- The acquisition of land for long range development plans is costly and does not have the support of the FAA under the Airport Improvement Program.
- The increase in aviation activity following deregulation outstripped the proprietor's reasonable resources to acquire real estate interests.
- Often the needed real estate interests are within the jurisdiction of other local governments which oppose acquisition.

319. For a good discussion of the advantages and disadvantages of government liability as a rule of law see Spader, *Immunity v. Liability and the Clash of Fundamental Values: Ancient Mysteries Crying Out for Understanding*, 61 CHI.-KENT L. REV. 61 (1985).

320. The public sector can learn a lot from the leaders of successful private enterprises. DiMarco, Goodson & Houser, *Situational Leadership in a Project/Matrix Environment*, PROJECT MGMT. J., Mar. 1989, at 11; Kennedy, *How Marriott Corporation Grew Five-Fold in Ten Years*, LONG RANGE PLAN. Apr. 1988, at 10.

321. *See* W. BENNIS & B. NAUS, LEADERS: THE STRATEGIES OF TAKING CHARGE (1985); J. KOTEEN, STRATEGIC MANAGEMENT IN PUBLIC AND NONPROFIT ORGANIZATIONS: THINKING AND ACTING STRATEGICALLY ON PUBLIC CONCERNS; Bennis, *Leadership: A Beleaguered Species*, 5 ORGANIZATIONAL DYNAMICS, Summer 1976, at 3; *Community Leadership*, 77 NAT'L. CIVIC REV. 500-85 (1988); HEIFETZ & SINDAR, *Political Leadership: Managing the Public's Problem Solving*, in THE POWER OF PUBLIC IDEAS 179 (R. Reich ed. 1988). For an interesting view of federal lead-

While we are unaccustomed to thinking about leadership as a team effort, it is likely that real progress on these issues will require the banding together of various leaders from government and the private sector. The following are among the most important leadership talents needed for effective change in this area.

a). Airport policy leadership must be skilled in *learning* and *communicating*, rather than maneuvering. These leaders should accept a period of "logical incrementalism" when the various interests interact and come to know one another's differences.[322] The better leadership approach involves cross-education and recognition of emerging consistencies. Thereafter, these leaders must be capable of communicating such consistencies with others.

b). This leadership corps must surely be individuals with *technical and professional competence*[323] in the issues relating to airport problem solving. They should also possess the intuitive, social know-how,[324] and analytical skills to cull out the irrelevant or least important from the mass of information and issues associated with airport activity.

c). With their competence, and after a period of learning and communication, the leaders must be willing to make decisions or *promote decisive action*. Decisions need to be made in this area.

V. CONCLUSIONS AND RECOMMENDATIONS

Among the Nation's transportation policy issues, the conflicts associated with airports and airport activities have been among the more difficult to resolve. This paper suggests that changes in airport policy should focus on: enhancing private and public sector accountability for airport-related decisions; and promoting cooperative, long range planning.

It is assumed that the creation of a truly *national* air transportation system will require strong leadership to unify the diverse interests. Such

---

ership by a former Secretary of Transportation see Devine & Burnley, *So You Want to Run an Agency*, POL'Y REV., Winter 1989, at 8.

322. *See* Quirk, *The Cooperative Resolution of Policy Conflict*, 83 AM. POL. SCI. REV. 905 (1989). Normally, this education process takes time. Unfortunately, the turnover of key players in both government and the private sector makes it difficult to finish this important phase. Solutions to this problem are suggested in Young & Norris, *Leadership Change and Action Planning*, 48 PUB. ADMIN. REV. 564 (1988).

323. *See* Mintzberg & McHugh, *Strategy Formation in an Adhocracy*, 30 ADMIN. SCI. Q. 160 (1985); Trowbridge, *"Titanic Planning" in an Uncertain Environment*, 21 LONG RANGE PLAN., Apr. 1988, at 86.

But, some argue that even with know-how and strategic planning the Nation cannot be lead through the economic and social problems until the citizens' confidence is restored in government. Farazmand, *Crisis in the U.S. Administrative State*, 21 ADMIN. & SOC'Y 173 (1989).

324. KOCHEN, *Social Know-How and Its Role in Invention and Innovation*, in INNOVATION IN THE PUBLIC SECTOR 269 (R. Merritt & A. Merritt eds. 1985).

leadership should include Congress, perhaps the House Committee on Public Works and Transportation, and the Executive Branch, likely the Secretary of Transportation.

The more conflict-laden issues, primarily those dealing with accountability, will require considerable public debate and eventually federal legislation. These issues ought to be addressed by Congress, which may use a combination of research, hearings, and national leadership councils.

Other airport problems, many related with planning, are within the existing legislative jurisdiction of the Secretary of Transportation. Naturally, most of these issues face competing transportation priorities. But here, the Secretary will have to demonstrate leadership: by testing his ability to unify diverse interests; and by choosing long term benefits over expediency.

CONGRESS RECOMMENDATIONS

CONGRESS RECOMMENDATION ONE: *AMEND FEDERAL AVIATION LAW TO MORE CLEARLY DEFINE AIRPORT "PROPRIETARY POWERS AND RIGHTS" TO PREVENT THE FEDERAL AVIATION ADMINISTRATION FROM GIVING UNDUE DEFERENCE TO AIRPORT PROPRIETORS WHEN INTERSTATE AIR COMMERCE MATTERS ARE AT STAKE.*

CONGRESS RECOMMENDATION TWO: *TAKE ACTION TO SPREAD THE LEGAL LIABILITY FOR AIRCRAFT NOISE INJURIES AMONG BOTH PUBLIC AND PRIVATE SECTOR INTERESTS WHICH ARE RESPONSIBLE FOR THE CONTROL OF AIRCRAFT NOISE OR OF THE PHYSICAL ENVIRONMENT THROUGH WHICH THE NOISE EMANATES.*

CONGRESS RECOMMENDATION THREE: *ACT TO INCREASE THE PARTICIPATION AND ACCOUNTABILITY OF AIRCRAFT OPERATORS, AND LOCAL GOVERNMENTS HAVING JURISDICTION OVER AIRPORT VICINITY LAND USE CONTROL, IN NOISE COMPATIBILITY AND NATIONAL AIR TRANSPORTATION SYSTEM PLANNING.*

DEPARTMENT OF TRANSPORTATION RECOMMENDATIONS

DOT RECOMMENDATION ONE: *IN CLOSE CONSULTATION WITH THE DIVERSE AIRPORT INTEREST GROUPS, DEVELOP PROCEDURES AND THE FORMAT FOR A NATIONAL AIRPORT SYSTEM PLAN WHICH WILL SERVE AS THE PRIMARY AIRPORT POLICY AND LONG RANGE PLANNING DOCUMENT FOR THE NATION.*

DOT RECOMMENDATION TWO: *ESTABLISH A NATIONAL AIRPORT REAL PROPERTY ACQUISITION PROGRAM WITH SPECIFIC GOALS INCLUDING: THE IDENTIFICATION AND PRIORITIZATION OF LONG RANGE NATIONAL AIRPORT SYSTEM REAL PROPERTY REQUIREMENTS; THE TRAINING OF*

AIRPORT PROPRIETORS IN THE PLANNING AND ACQUISITION OF REAL PROPERTY INTERESTS FOR AIRCRAFT NOISE ABATEMENT AND FUTURE AERONAUTICAL PURPOSES; AND THE INCREASED USE OF AVAILABLE FEDERAL PROPERTY FOR NATIONAL AIR TRANSPORTATION SYSTEM PURPOSES.

DOT RECOMMENDATION THREE: *AFTER STUDYING FEDERAL AND STATE LAND USE CONTROL INITIATIVES (SUCH AS FLOODPLAINS, COASTAL ZONES, AND SO FORTH), ADOPT APPROPRIATE FEDERAL PROCEDURES, STANDARDS, AND INCENTIVES TO REDUCE INCOMPATIBLE DEVELOPMENT IN THE VICINITY OF NATIONAL-SYSTEM AIRPORTS.*

DOT RECOMMENDATION FOUR: *ENSURE THAT THE FAA AIRPORT SERVICES MANPOWER IS ADEQUATE TO REGULARLY PARTICIPATE WITH AIRPORT PROPRIETORS IN NEGOTIATING INDIVIDUAL NOISE COMPATIBILITY AND CAPACITY ENHANCEMENT AGREEMENTS.*

DOT RECOMMENDATION FIVE: *EVALUATE THE NEED FOR MORE COMMUNITY RELATIONS, REAL ESTATE, AND URBAN PLANNING PROFESSIONALS WITHIN THE NATIONAL AIR TRANSPORTATION SYSTEM; AND ADOPT APPROPRIATE BUDGET INITIATIVES TO INTEGRATE SUCH SKILLS INTO FAA AND AIRPORT PROPRIETOR EDUCATION, PLANNING, AND DECISIONMAKING.*

APPENDIX A

A BILL

To establish a program for airport system planning in the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Airport System Planning Act of 1990."

SEC. 2. AMENDMENTS TO AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982.

(a) NATIONAL AIRPORT SYSTEM PLAN.—Section 504 of the Airport and Airway Improvement Act of 1982 (49 U.S.C. App. 2202) is amended—

(1) by striking subsections (a) and (c); and

(2) by redesignating subsections (b) and (d) as subsections (a) and (b), respectively.

(b) PROJECT GRANT APPLICATIONS.—

(1) PROPOSED PROJECTS.—Section 509(a)(1) of such Act (49 U.S.C. App. 2202(a)(1)) is amended by striking the second sentence and inserting the following: "No project grant application shall propose airport development or airport planning except in connection with public-use airports included in an Airport Capital Improvement Plan prepared pursuant to section 5 of the Airport System Planning Act of 1990."

(2) APPROVAL.—Section 509(b)(1) of such Act (49 U.S.C. App. 2202(b)(1)) is amended—

(A) by striking "and" at the end of subparagraph (D);

(B) by striking the period at the end of subparagraph (E) and inserting "; and "; and

(C) by adding at the end the following new subparagraph:

"(F) the project is reasonably consistent with airport and aviation system plans (existing at the time of approval of the project) of the State and the regional transportation planning authorities of the area in which the airport is located."

SEC. 3. PERFORMANCE MEASURES FOR AIRPORTS.

(a) ESTABLISHMENT.—The Secretary shall establish performance measures to assist in airport planning. Such measures shall be developed to provide guidance in the following areas:

(1) Evaluating the extent and effects of air transportation delay and congestion at an airport.

(2) Evaluating the degree to which certain capital improve-

ments, pricing, and other actions may reduce air transportation delay and congestion at an airport.

(3) Evaluating the effect on other airports and the national air transportation system of use restrictions adopted by 1 or more airports.

(4) Planning roadways and surface transportation facilities to ensure the least constrained access to airports.

(5) Considering and managing the environmental consequences of airport activity in a manner which will reduce interference between airport activities and other activities.

(6) Judicious acquisition and effective control of airport real property interests to satisfy long-range needs for aeronautical land and measures of incompatibility in land uses in the vicinity of airports.

(7) Such other areas as the Secretary considers appropriate.

(b) PARTICIPATION.—The Secretary shall provide each State and each sponsor, owner, and operator of a public-use airport an opportunity to participate in the establishment of performance measures under this section.

(c) USE.—The Secretary shall use performance measures established under this section for evaluating individual airport improvement projects and for evaluating the needs of the Nation's system of airports in conducting planning activities under this Act.

(d) REPORT.—Not later than 180 days after the date of the enactment of this Act, the Secretary shall publish procedures for the establishment of performance measures under this section.

SEC. 4. STRATEGIC PLAN FOR AIRPORTS.

(a) STRATEGIC PLANNING FORUM.—

(1) IN GENERAL.—Not later than 1 year after the date of the enactment of this Act, and every 4 years thereafter, the Secretary shall conduct a national forum of Federal, State, and local government officials and appropriate private sector representatives to identify and evaluate long-range problems associated with public-use airports and objectives in solving such problems.

(2) NOTICE.—The Secretary shall publish notice of each forum to be conducted under this subsection not later than 180 days before the date of the first day of the forum. In providing such notice, the Secretary shall request that officials participating in the forum transmit to the Secretary, not later than 60 days before such date, a report which identifies and evaluates problems and objectives referred to in paragraph (1).

(3) PUBLICATION OF REPORT SUMMARIES.—Not later than 10 days before the date of the first day of the forum, the Secretary shall

publish in the Federal Register a summary of reports submitted to the Secretary pursuant to paragraph (2).

(b) STRATEGIC PLAN.—Not later than 1 year after the date of the last day of each forum to be conducted under this section, the Secretary shall transmit to Congress and the President a strategic plan for airports. Each plan shall include the following:

(1) Five, 10, and 20-year forecasts of aviation activity and the likelihood of serious congestion and delay problems at each public-use airport.

(2) Identification and discussion of the assumptions and methodology supporting such forecasts.

(3) A discussion of performance measures established by the Secretary under section 3.

(4) A summary of State planning activities conducted under section 6.

(5) A summary of planning by the Department of Transportation and the Department of Defense to make domestic military airports and airport facilities available for civil aviation uses.

(6) A description of State efforts to improve airport vicinity land use planning, including efforts to enact and implement the model State statute developed pursuant to section 8.

(7) A description in order of priority of 10 long-range national problems facing public-use airports, as determined by the Secretary, and possible solutions to remedy each such problem.

SEC. 5. AIRPORT CAPITAL IMPROVEMENT PLANNING.

(a) AIRPORT CAPITAL IMPROVEMENT PLAN.—Not later than January 15th of each year beginning after the date of the enactment of this Act, the Secretary shall transmit to Congress and the President an Airport Capital Improvement Plan. Each plan shall include—

(1) a list of airport improvement projects which may receive Federal funding in the next 5 fiscal years;

(2) a prioritization of such projects by program year;

(3) an evaluation of constraints on the development of such projects, including financial, environmental, technical, operational, and governmental constraints; and

(4) specific actions which may be taken to eliminate or reduce such constraints.

(b) CONSISTENCY WITH OTHER PLANNING.—The Secretary shall, to the maximum extent possible, ensure that each plan prepared pursuant to subsection (a) is consistent with the Federal airway capital investment plan, State aviation and airport system plans, public-use airport plans, and aviation plans adopted by other public agencies. Upon request of a

State, the sponsor, owner, or operator or a public-use airport, or the head of a public agency, the Secretary shall provide a written explanation of inconsistencies between a plan prepared pursuant to subsection (a) and any another aviation plan.

(c) PLANNING PROCESS.—The Secretary shall establish an airport capital improvement planning process under which items to be included in an Airport Capital Improvement Plan are updated and evaluated on an on-going basis.

SEC. 6. STATE AIRPORT SYSTEM PLANNING.

(a) FEDERAL COOPERATION IN STATE AIRPORT SYSTEM PLANNING.—

(1) IN GENERAL.—Upon request of the Governor of a State, the Secretary shall cooperate in the airport system planning of such State.

(2) SCOPE OF FEDERAL PARTICIPATION.—Subject to the Secretary's approval, the Governor of a State shall establish the scope of activities to be undertaken by the Secretary under this section. Such activities may include on-going Federal and State planning efforts, as well as the establishment of an annual joint planning meeting to exchange information, discuss problems, objectives, and alternative solutions, and develop joint policies.

(3) PUBLIC INFORMATION.—The Secretary and the Governor of a State shall make information available to the public concerning planning activities undertaken pursuant to this section.

(b) MINIMUM FEDERAL PARTICIPATION.—At a minimum, the Secretary shall participate in the airport system planning of a State—

(1) by providing the State necessary Federal coordination and information in the development of a State airport capital improvement plan;

(2) by assisting the State in the development of forecast assumptions and methodologies in support of a State airport system plan and individual airport planning;

(3) by providing the State, in a timely manner, information concerning advances in transportation technology and likely effects of such technology on State airport system planning;

(4) by providing the State with a Federal assessment of the need for civil use of Federal military airfields in such State; and

(5) by cooperating with the State in the planning of airport ground access alternatives in the State.

(c) AIRSPACE APPLICABILITY.—The Secretary shall consider the results of any State airport system planning in actions affecting the airspace system in the State.

(d) INTERMODAL AND MULTIMODAL PLANNING.—The Secretary shall

ensure active Federal participation in State intermodal and multimodal transportation system planning.

SEC. 7. AIRPORT FORECAST MODEL.

The Secretary shall, in consultation with the States and the sponsors, owners, and operators of public-use airports, establish guidelines for forecasting aviation activity at public-use airports and within each State. Such guidelines shall include recommendations for—

(1) standardization of data to be collected in support of airport activity forecasts;

(2) uniform units of measurement and uniform data collection periods; and

(3) a methodology for developing credible forecast assumptions and analysis.

SEC. 8 AIRPORT VICINITY LAND USE PLANNING.

(a) MODEL STATE STATUTE.—The Secretary, in consultation with the States, shall develop a model State statute for airport vicinity land use planning. Such statute shall establish a planning process which addresses the following:

(1) Orderly exchanges of information about land use, airport operations, and other public and private activities conducted in the vicinity of public-use airports.

(2) Designation of an appropriate public agency to consider and resolve conflicting interests in the vicinity of public-use airports.

(3) Means of improving compatibility of surrounding land uses with respect to airport noise exposure, risk of aircraft crash hazards, and building and structure height restrictions to protect the airspace used by aircraft.

(4) Coordination of planning among Federal, State, regional, and local public agencies with activities conducted in the vicinity of public-use airports.

(5) Methods for achieving the greatest degree of consistency in the planning of agencies referred to paragraph (4).

(b) MODEL STATE STATUTE IMPLEMENTATION.—After publication of the model State statute developed under subsection (a), the Secretary shall, upon request of the Governor of a State, assist the State in adopting the model statute in the State. Such assistance may include the support of a federally organized airport vicinity land use task group. Members of any such group shall have experience in the legislative, legal, and public relations aspects of airport vicinity land use planning, as well as familiarity with the model statute.

(c) REPORT.—The Secretary shall, upon development of a model

State statute under this section, transmit a report to Congress and the President containing a description of such statute.

SEC. 9 AIRPORT ECONOMIC SIGNIFICANCE.

(a) NATIONAL SIGNIFICANCE.—The Secretary shall conduct research and establish a methodology for determining the relationship between airport system capacity enhancement alternatives and the overall performance of the national economy, including the impact of such alternatives on private sector production of goods and services and on the Nation's international competitiveness.

(b) REGIONAL SIGNIFICANCE.—The Secretary, in consultation with the States, shall establish a preferred methodology for estimating the regional economic significance of airports in the United States. Such methodology shall define categories of economic impact and benefit and specify the data required to determine the value of impacts and benefits. The Secretary may also develop an alternative methodology for estimating economic significance for use by airports unable to assemble the data required by the preferred methodology because of the expense of assembling such data. Any such alternative methodology shall include parameters to assist airports in determining various categories of impact and benefit.

SEC. 10. DEFINITIONS.

For the purposes of this Act, definitions contained in section 503 of the Airport and Airway Improvement Act of 1982 shall apply.

APPENDIX B

A BILL

To establish the Council on Civil Aviation Noise.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Council on Civil Aviation Noise Act of 1990."

SEC. 2. ESTABLISHMENT.

There is established a council to be known as the "Council on Civil Aviation Noise" (hereinafter in this Act referred to as the "Council").

SEC. 3. DUTIES; REPORTS.

(a) DUTIES.—

(1) FORMULATION OF PRINCIPLES.—The Council shall formulate broad governmental, economic, and social principles to guide private and public actions to abate and control civil aviation noise and its impacts in the United States. In formulating such principles, the Council shall take into account the needs of individuals and institutions affected by civil aviation noise. Such needs include—

(A) clearer accountability by private and public interests involved in civil aviation decisionmaking;

(B) increased cooperation among interests affected by civil aviation noise in the development of noise abatement and control actions;

(C) a better process for identifying and responding to concerns of individuals relating to civil aviation noise;

(D) a means of balancing public and private interests on civil aviation issues and of balancing local, regional, State, national, and international interests on such issues; and

(E) clearer definition of national interests which should be considered by individuals making local, regional, and State decisions affecting civil aviation noise.

(2) RESEARCH.—In addition to its duties under paragraph (1), the Council shall conduct research to assist in the development of comprehensive Federal legislative and administrative initiatives on the issue of civil aviation noise. Such research shall include a study of—

(A) the costs and benefits of various civil aviation noise abatement and control actions;

(B) economic parameters to determine the need for and the

level of compensation for economic injury from civil aviation noise;

(C) the impact of various airport use restrictions on the flow of interstate and foreign commerce;

(D) safety considerations associated with civil aviation noise abatement and control actions;

(E) the technical and technological requirements for effective civil aviation noise abatement and control actions and the role of science in achieving better private and public decision-making in this area; and

(F) alternatives for raising revenues needed for noise abatement and control actions.

(b) REPORTS.—

(1) INITIAL REPORT.—Not later than 4 months after the date of the first meeting of the Council, the Council shall transmit to the President and Congress a report containing a brief description of—

(A) the principles formulated under subsection (a)(1); and

(B) the areas of research which the Council plans to pursue under subsection (a)(2).

(2) SUMMARY OF RESEARCH.—Not later than 12 months after the date of the first meeting of the Council, the Council shall transmit to the President and Congress a summary of its research under subsection (a)(2).

(3) FINAL REPORT.—Not later than 18 months after the date of the first meeting of the Council, the Council shall transmit to the President and Congress a final report containing the text of the reports transmitted under paragraphs (1) and (2) together with a description of comprehensive Federal legislative and administrative initiatives which promote the principles formulated by the Council under subsection (a)(1).

SEC. 4. MEMBERSHIP.

(a) NUMBER AND APPOINTMENT.—The Council shall be composed of 14 members appointed not later than 90 days after the date of the enactment of this Act as follows:

(1) The Secretary of Transportation.

(2) One Member of the Senate appointed by the President pro tempore of the Senate.

(3) One Member of the House of Representatives appointed by the Speaker of the House of Representatives.

(4) Eleven individuals appointed by the Secretary of Transportation in accordance with subsection (b).

(b) QUALIFICATIONS.—

(1) INTERESTS TO BE REPRESENTED.—Members appointed under subsection (a)(4) shall include the following:

(A) The Governor of a State with a civil aviation noise problem.

(B) A representative of a major public use airport.

(C) An elected official from two units of local government representing areas heavily impacted by civil aviation noise.

(D) A chief executive officer of a major commercial passenger air carrier.

(E) A chief executive officer of a major commercial cargo air carrier.

(F) An experienced air transport rated aircraft pilot.

(G) A representative of the aircraft manufacturing industry.

(H) Two homeowners living in communities heavily impacted by civil aviation noise.

(I) A representative of a public school or school district heavily impacted by civil aviation noise.

(2) QUALITIES.—Each member appointed under subsection (a)(4) shall possess the following qualities:

(A) Demonstrated leadership on civil aviation issues.

(B) Ability to credibly represent the concerns of the group which they represent.

(C) Ability to thoughtfully weigh and balance the diverse interests associated with civil aviation noise.

(c) CONTINUATION OF MEMBERSHIP.—If a member was appointed to the Council as a Member of Congress and that member leaves that office that individual may continue as a member for not longer than the 60-day period beginning on the date that individual leaves that office.

(d) TERMS; VACANCIES.—Members shall be appointed for the life of the Council. A vacancy in the Council shall be filled in the manner in which the original appointment was made.

(e) COMPENSATION; TRAVEL EXPENSES.—Members shall serve without pay. Each member appointed under subsection (a)(4) shall receive travel expenses, including per diem in lieu of subsistence, in accordance with sections 5702 and 5703 of Title 5, United States Code.

(f) QUORUM.—Seven members of the Council shall constitute a quorum but a lesser number may hold hearings.

(g) MEETINGS.—The Council shall meet at the call of the Chairman or a majority of its members. The first meeting of the Council shall be called

promptly by the Secretary of Transportation after the appointment of its members.

(h) CHAIRMAN; VICE CHAIRMAN.—At the first meeting of the Council, the members shall elect a chairman and vice chairman from among its members.

(i) VOTING.—Each member of the Council shall be entitled to 1 vote which shall be equal to the vote of every other member of the Council.

SEC. 5. ADVISORY GROUP.

(a) ESTABLISHMENT.—There is established an advisory group to provide such assistance and advice as the Council may request.

(b) MEMBERSHIP.—The advisory group shall be composed of 10 members as follows:

(1) The Administrator of the Environmental Protection Agency, who shall be the Chairman of such group.

(2) The Secretary of Housing and Urban Development.

(3) The Secretary of Commerce.

(4) The Chairman of the National Transportation Safety Board.

(5) The Chairman of the National Governors Association.

(6) The President of the National Conference of State Legislatures.

(7) The President of the National Association of Counties.

(8) The President of the National Association of Regional Councils.

(9) The President of the National League of Cities.

(10) The President of the United States Conference on Mayors.

(c) COMPENSATION.—The members of the advisory group shall serve without pay.

(d) TERMINATION.—The advisory group shall cease to exist upon the submission of the final report required in section 3(b)(3) of this Act.

(e) INTERNATIONAL ISSUES.—The Council shall also consult with the Secretary-General of the International Civil Aviation Organization and the Director General of the International Air Transport Association, as appropriate.

SEC. 6. DIRECTOR AND STAFF OF COUNCIL; EXPERTS AND CONSULTANTS.

(a) DIRECTOR.—The Council shall, without regard to section 5311(b) of Title 5, United States Code, have a Director who shall be appointed by the Council. The Director shall be paid at a rate not to exceed the rate of basic pay payable for level I of the Executive Schedule.

(b) QUALIFICATIONS OF DIRECTOR.—The Director shall be appointed

from among individuals who have demonstrated knowledge of aviation matters and a strong sense of public service in aviation.

(c) STAFF.—The Council may appoint and fix the pay of such additional personnel as the Chairman considers appropriate. Such additional personnel shall not exceed 10 individuals and each individual appointed shall be compensated at a rate not to exceed the annual rate of basic pay payable for GS-18 of the General Schedule.

(d) EXPERTS AND CONSULTANTS.—The Council may procure temporary and intermittent services under section 3109(b) of Title 5, United States Code.

(e) DEPARTMENT OF TRANSPORTATION STAFF.—Upon request of the Council, the Secretary of Transportation may detail not to exceed 10 employees of the Department of Transportation to the Council to assist it in carrying out its duties under this Act. Any detailing of personnel under this subsection shall be without reimbursement by the Council to the Department of Transportation.

SEC. 7. POWERS OF COUNCIL.

(a) HEARINGS AND SESSIONS.—The Council may, for the purpose of carrying out this Act, hold hearings, sit and act at times and places, take testimony, and receive evidence as the Council considers appropriate.

(b) POWERS OF MEMBERS AND AGENTS.—Any member or agent of the Council may, if so authorized by the Council, take any action which the Council is authorized to take by this section.

(c) RULES AND REGULATIONS.—The Council may adopt such rules and regulations as may be necessary to establish its procedures and to govern the manner of its operations, organization, and personnel.

(d) OBTAINING OFFICIAL DATA.—The Council may request from the head of any department or agency of the United States information and technical assistance necessary to enable it to carry out this Act. Each such department or agency shall to the extent permitted by law and subject to the exemptions set forth in section 552 of Title 5, United States Code, furnish such information or assistance to the Council, upon request of the Chairman or Vice Chairman of the Council.

(e) MAILS.—The Council may use the United States mails in the same manner and under the same conditions as other departments and agencies of the United States.

(f) ADMINISTRATIVE SUPPORT SERVICES.—Upon the request of the Council, the Administrator of General Services shall provide to the Council, on a reimbursable basis, the administrative support services necessary for the Council to carry out its duties under this Act.

(g) CONTRACT AUTHORITY.—The Council may contract with and compensate government and private agencies or persons for the purpose of

conducting research or surveys necessary to enable the council to discharge its duties under this Act, without regard to section 3709 of the Revised Statutes (41 U.S.C. § 5).

SEC. 8. TERMINATION.

(a) IN GENERAL.—The Council shall terminate 30 days after submitting its final report under section 3(b)(3).

(b) DISPOSITION OF REMAINING FUNDS AND PROPERTY.—Any funds held by the Council on the date of its termination under subsection (a) shall be deposited in the general fund of the Treasury and credited as miscellaneous receipts. Any property (other than funds) held by the Council on such date shall be disposed of as excess or surplus property.

SEC. 9. SECRETARY OF TRANSPORTATION.

In each of the first 3 years beginning after the Council submits a final report pursuant to section 3(b)(3), the Secretary of Transportation shall submit to Congress a report which contains a description of Federal efforts to implement administrative initiatives recommended by the Council together with the Secretary's recommendations for such legislative actions as may be necessary to achieve a comprehensive Federal civil aviation noise policy which is consistent with the principles adopted by the Council.

SEC. 10. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to carry out this Act $5,500,000 for each of fiscal years 1991 and 1992.

SEC. 11. BUDGET ACT COMPLIANCE.

Any spending authority, as defined in section 651(c)(2)(A) and (C) of the Congressional Budget Act of 1974 (2 U.S.C. § 651(c)(2)(A) and (C)), authorized by this Act shall be effective only to such extent and in such amounts as are provided in appropriation Acts.