Report # 03-04

OLA

OFFICE OF THE LEGISLATIVE AUDITOR

STATE OF MINNESOTA

JANUARY 2003

Metropolitan Airports Commission

PROGRAM EVALUATION DIVISION
Centennial Building - Suite 140
658 Cedar Street - St. Paul, MN 55155
Telephone: 651-296-4708 ♦ Fax: 651-296-4712
E-mail: auditor@state.mn.us ♦ Web Site: http://www.auditor.leg.state.mn.us

Program Evaluation Division

The Minnesota Office of the Legislative Auditor was established in 1973, replacing the century-old Public Examiner's Office. Its role is to audit and evaluate public programs and ensure accountability for the expenditure of public funds. In 1975, the Legislature created the Program Evaluation Division within the auditor's office. The division's mission, as set forth in law, is to determine the degree to which activities and programs entered into or funded by the state are accomplishing their goals and objectives and utilizing resources efficiently.

The division conducts a variety of studies for the Legislature, including *program reviews*, which describe state programs; *program evaluations*, which examine whether programs are implemented efficiently and achieving results; and *best practices reviews*, which identify the most efficient and effective methods of service delivery. The division also conducts follow-up studies and updates previous research findings.

Topics for study are approved by the Legislative Audit Commission (LAC), a 16-member joint, bipartisan commission. The division's reports, however, are solely the responsibility of the Office of the Legislative Auditor. Findings, conclusions, and recommendations do not necessarily reflect the views of the LAC or any of its members.

The Office of the Legislative Auditor also includes a Financial Audit Division, which annually conducts a statewide audit of the 25 largest agencies, an audit of federal funds, and approximately 40 financial and compliance audits of individual state agencies.

Professional Staff

James Nobles, *Legislative Auditor*
Roger Brooks, *Deputy Legislative Auditor*

Joel Alter
Valerie Bombach
David Chein
Jody Hauer
Adrienne Howard
Daniel Jacobson
Deborah Junod
Carrie Meyerhoff
John Patterson
Judith Randall
Jan Sandberg
Jo Vos
John Yunker

Support Staff

Geri Britton
Denice Malone
Theresa Wagner
Barbara Wing

This document can be made available in alternative formats, such as large print, Braille, or audio tape, by calling 651/296-8976 Voice, or the Minnesota Relay Service at 651/297-5353 or 1-800-627-3529.

e-mail: auditor@state.mn.us
Reports of the Office of the Legislative Auditor are available at our Web Site:
http://www.auditor.leg.state.mn.us

Printed on Recycled Paper.

Photo Credits:

The *Metropolitan Airports Commission* cover photograph and those on pages 9, 11, 34, 35, 39, 41, 46, 57, 80, and 112 were provided by the Metropolitan Airports Commission's Public Affairs Office; the images on 26 and 44 were captured off Northwest Airlines' web page; and the pictures on pages 71 and 104 were taken by Legislative Auditor staff.

OFFICE OF THE LEGISLATIVE AUDITOR
State of Minnesota • James Nobles, Legislative Auditor

January 2003

Members
Legislative Audit Commission

In April 2002, the Legislative Audit Commission directed the Office of the Legislative Auditor (OLA) to evaluate the Metropolitan Airports Commission. The commission was particularly interested in issues related to MAC's governance structure, finances, and efforts to address airport noise.

We do not recommend major structural changes in MAC, but we do recommend stronger oversight by the Legislature and Governor. Although MAC manages the Minneapolis-St. Paul Airport with relative efficiency, it operates with considerable autonomy. Given the financial distress in the airline industry, policy makers should help to ensure that MAC exercises fiscal restraint. In our view, the Minneapolis-St. Paul Airport is a critically important state resource, and its management, finances, economic and environmental impacts, and future viability deserve more attention from state officials.

This report was researched and written by Joel Alter (project manager), John Yunker, and Todd Wilkinson. We received the full cooperation of the Metropolitan Airports Commission in the preparation of this report.

Sincerely,

/s/ James Nobles

James Nobles
Legislative Auditor

/s/ Roger Brooks

Roger Brooks
Deputy Legislative Auditor

Room 140, 658 Cedar Street, St. Paul, Minnesota 55155-1603 • Tel: 651/296-4708 • Fax: 651/296-4712
E-mail: auditor@state.mn.us • TDD Relay: 651/297-5353 • Website: www.auditor.leg.state.mn.us

Table of Contents

List of Tables and Figures

Figures Page

Summary

The Metropolitan Airports Commission (MAC) is generally well regarded, but it should be subject to more state oversight.

Major Findings:

- The Metropolitan Airports Commission (MAC) operates with considerable autonomy and limited oversight by state officials (pp. 93-101 of the full report).
- Nevertheless, MAC's administration of the Minneapolis-St. Paul Airport (MSP) is generally well regarded, and the airport's operating costs are relatively low compared with other U.S. airports (pp. 11, 18).
- MAC has shown more fiscal restraint than most airports in recent years, but the 12 percent increase proposed by MAC staff for 2003 was insensitive to the airline industry's financial distress and not adequately justified in presentations to the commission. The commission ultimately adopted a 6 percent increase and kept airline charges from increasing by using revenues from 2002 (pp. 21-29).
- MAC receives lower rents from food, beverage, and retail concessionaires than do most other large airports (p. 38).
- The noise mitigation program for MSP is one of the largest in the nation, and it is generally consistent with broad policies set forth by MAC and the Legislature in the mid-1990s (pp. 68, 82).
- Eligibility for MAC's sound insulation program is based on airport noise projections for 1996 that proved to be inaccurate. Some homes did not qualify for insulation although they experienced noise levels in 1996 that exceeded the threshold used to determine eligibility. In general, however, noise levels have declined since the mid-1990s (pp. 72, 77, 83).

Key Recommendations:

- The Legislature should (1) require Senate confirmation of MAC commissioners, (2) specify commissioners' terms in law and clarify the Governor's authority to replace commissioners, (3) periodically hold hearings to discuss MAC's budget, performance, and policies, (4) require MAC to issue a preliminary budget 90 days prior to MAC's budget approval, and (5) consider expanding the list of MAC capital projects that, by law, must be approved by the Metropolitan Council (pp. 108-114).
- MAC should (1) extend the time for public consideration of its initial budget targets, (2) improve the availability of public information regarding its policies and meetings, and (3) consider increasing the percentage of gross sales paid as rent by food, beverage, and retail concessionaires (pp. 40, 113-114).

Report Summary

The Legislature established the Metropolitan Airports Commission (MAC) in 1943 to plan and operate airports in the Twin Cities region. MAC's principal responsibility is management of Minneapolis-St. Paul International Airport, which has the seventh largest number of "operations" (arrivals and departures) among U.S. airports. MAC also operates six "reliever" airports in the region.

Airport Operating Costs Are Low; Concession Revenues Could Be Higher

MAC exercised fiscal restraint following the September 2001 terrorist attacks, but the staff's proposed 2003 budget increase was not justified.

MAC's annual operating revenues totaled about $170 million in 2001. MAC's revenues come primarily from (1) rates and charges paid by airlines, and (2) concessions (parking, rental cars, and food, beverage, and retail outlets). MAC receives no state appropriation, and it currently levies no property taxes (although it has authority to do so).

The rates and charges paid by airlines using the Minneapolis-St. Paul Airport have been relatively low. In 2000, the airlines' costs per "enplaned passenger" were 12 percent lower at the Minneapolis-St. Paul Airport than the median for "large hub" U.S. airports.[1] Likewise, the airport's overall operating costs per enplaned passenger were 37 percent below the median cost for large hub U.S. airports. Between 1990 and 2001, inflation-adjusted operating costs per enplaned passenger increased 3 percent at Minneapolis-St Paul Airport.

Following the September 11, 2001 terrorist attacks, MAC reduced its operating expenses more than most airports. MAC's 2002 budget was 6 percent lower than its actual 2001 spending. Only 2 of 20 airports we contacted (Jacksonville and Los Angeles) reduced their operating budgets by a larger percentage than did MAC; half of the airports actually increased their operating budgets.

MAC staff initially proposed a 12 percent budget increase for 2003. While airport rates and charges have a relatively small impact on airlines' financial viability, staff provided insufficient justification for the increase, and the proposal seemed out of step with the distress occurring in the airline industry. Ultimately, the commission reduced the increase to less than 6 percent and used 2002 operating income to keep airline charges from increasing.

Following the September 11 attacks, MAC reduced its 2002 capital budget by 80 percent, mostly through short-term deferrals of projects. This was a larger reduction than that of most other major U.S. airports. Still, MAC is proceeding with a legislatively-authorized capital plan, projected to cost $2.5 billion before its completion in 2010. MAC presently estimates that the plan will cost 3 percent more than original estimates, but about one-third of the work has not yet been bid out.

MAC's revenues from retail, food, and beverage concessions totaled $8.6 million in 2001. On average, the rental rates charged to concessionaires at the Minneapolis-St. Paul Airport are about one-fourth lower than those charged at other large airports. Various food, beverage, and retail contracts will expire at the end of 2003, and MAC should use this opportunity to consider increases in the percentage of gross sales paid as rent.

Minnesota-based Northwest Airlines leases 81 percent of the gates at Minneapolis-St. Paul Airport and has a significant impact on the state's economy. If not for federal assistance, Northwest's operating losses in 2001

1 A "large hub" is an airport that accounts for at least 1 percent of the nation's total enplaned passengers on U.S. air carriers. "Enplaned passengers" are all paying passengers who board aircraft; a passenger who changes planes once during a trip would have two enplanements for that trip.

would have been larger than those experienced in 1992, when the company was close to bankruptcy. Federal regulations restrict MAC's ability to assist individual airlines. But MAC has provided general relief to airlines by deferring charges for certain capital costs, and it assisted Northwest Airlines in 2002 by refinancing bonds issued on Northwest's behalf in the early 1990s. Meanwhile, MAC has taken steps to encourage competition at the Minneapolis-St. Paul Airport, but factors beyond MAC's control have limited the success of these efforts.

MAC's Noise Program Is Extensive, But Eligibility Has Been Based on Outdated Projections

MAC's proposed expansion of its residential sound insulation program would be more ambitious than the programs of other airports.

To mitigate the impact of airport noise, MAC has insulated about 7,000 homes near the Minneapolis-St. Paul Airport. This is one of the most extensive sound insulation programs among U.S. airports. So far, this program has been financed with passenger surcharges and federal funds.

When the Legislature decided in 1996 not to build a new airport, it required MAC to spend at least $185 million on noise mitigation from 1996 through 2002. MAC exceeded this requirement, having spent about $210 million since 1996 (and nearly $300 million since the program began).[2]

Eligibility for MAC's sound insulation program has depended on projections MAC did more than a decade ago. Homes have qualified for sound insulation if MAC projected in 1992 that their 1996 noise levels would be 65 DNL or greater. "DNL," or "day-night level," is a measure of noise based on 24-hour averages. However, MAC's projections for 1996 underestimated the airport's total number of flights, overestimated the use of quieter ("Stage 3") planes, and assumed that a much larger proportion of flights would depart and arrive over the Bloomington and south Richfield area than was actually the case. Consequently, certain areas in south Minneapolis, north Richfield, Mendota Heights, and Eagan experienced noise in excess of 65 DNL, even though MAC had projected noise in these areas of less than 65 DNL.

These higher-than-expected noise levels did not result, however, in more homes becoming eligible for sound insulation. MAC determines eligibility for sound insulation using noise exposure maps for *projected*, not *actual*, noise levels—consistent with regulations that govern the federal noise mitigation program from which MAC receives substantial funding. MAC did not revise its noise projections in the mid-1990s because the Legislature was in the midst of determining the airport's future. Moreover, even if MAC had updated its five-year projections in the mid-1990s, program eligibility might not have expanded—because MAC would have had to factor in the effect of quieter planes that federal law required by 2000.

There has been controversy regarding MAC's commitment to expand the sound insulation program after completing work on homes with noise above 65 DNL. Some local officials thought that MAC promised in 1996 to implement an expanded program identical to the existing program, but MAC's written commitments were not specific. In 2002, MAC reconsidered the issue and decided to provide *varying* levels of mitigation for homes with projected noise levels between 60 and 64 DNL. Still, MAC's noise mitigation policy for homes with noise levels below 65 DNL is more ambitious than that of other airports and commits to a spending level consistent with a 1999 operating agreement between MAC and the airlines.

2 Includes the cost of residential and school insulation, as well as property acquisition.

MAC Needs More State-Level Oversight

The Governor's appointees to MAC should be subject to Senate confirmation.

The Metropolitan Airports Commission consists of 15 appointed members, and its decisions do not require approval by elected officials. The Governor appoints 13 of the commissioners (not subject to legislative confirmation), and in recent years the Governor has had little contact with MAC beyond initial appointments. The Legislature had extensive discussions in the mid-1990s leading to a decision to keep the airport at its present location, but since then it has engaged in limited oversight of MAC's policies, budget, and performance.

MAC's actions have statewide impact and should receive frequent attention from state officials. MAC's decisions affect travelers, Minnesota-based airlines, and communities near Twin Cities airports. In addition, MAC makes large-scale capital budget decisions and operates one of Minnesota's most visible public facilities. Although airline officials generally think that MAC runs Minneapolis-St. Paul Airport effectively, they have sometimes questioned MAC's responsiveness to their concerns.

The Legislature should play a larger role in overseeing MAC—through periodic hearings and Senate confirmation of appointees. MAC does not receive a state appropriation, so the Legislature should not formally approve MAC's budget. But MAC should provide more time for legislative and public input into its proposed budgets, and it should improve public access to information regarding its meetings and policies. If necessary, the Legislature should provide direction in law regarding MAC's policy and budget priorities.

The 2002 Legislature discussed—but did not pass—major changes in MAC's governance structure, including proposals to make MAC a state agency. Nationally, states operate only 2 of the 40 largest airports. Changing MAC to a state agency would significantly disrupt an agency that has received generally good marks for its day-to-day airport management, and there is little support among Minnesota-based airlines for such a change. It would be preferable for the Legislature and Governor to improve state-level oversight of MAC, without making structural changes at this time.

In addition, the Legislature should clarify the terms of MAC commissioners and the Governor's authority to remove commissioners. Currently, the terms of eight members appointed by the Governor are not specified in law. In contrast, there are explicit statutory provisions for the other commissioners appointed by the Governor—specifically, the chair serves at the pleasure of the Governor, while four commissioners serve four-year terms.

Introduction

In 1943, the Minnesota Legislature created the Metropolitan Airports Commission (MAC) to own and operate airports in the Twin Cities region. The Twin Cities' airport system has changed significantly in the past 60 years, accommodating more flights, passengers, and air cargo.

Following the terrorist attacks of September 11, 2001, some legislators questioned whether MAC did enough to constrain its spending and assist Minnesota-based airlines. Legislators discussed possible changes in MAC's structure, including the possibility of making MAC a state agency. The 2002 Legislature made no changes, but in April 2002 the Legislative Audit Commission directed the Office of the Legislative Auditor to evaluate MAC. We asked the following questions:

- **Where does MAC get its revenues, and how does it spend them? How did MAC respond to the financial distress in the airline industry following September 11? How do the Minneapolis-St. Paul Airport's costs and concessions revenues compare with those at other large airports?**

- **What commitments regarding airport noise followed the Legislature's 1996 decision not to build a new airport? Have these commitments been kept? How accurately has MAC projected future levels of airport noise, and what implications have these projections had for residents' eligibility for noise mitigation? How does MAC's noise mitigation program compare with those at other airports?**

- **What has MAC done to support Northwest Airlines while trying to foster competition at Minneapolis-St. Paul Airport? What impact can MAC have on Northwest Airlines' financial well-being?**

- **How is MAC held accountable for its actions? Does MAC receive sufficient external oversight? What are the merits of possible changes to MAC's governance structure and the methods by which its commissioners are appointed? Is there sufficient opportunity for input into MAC decisions?**

To conduct the evaluation, we examined a variety of MAC documents, including budgets, bond prospectuses, noise mitigation plans, airline agreements, competition plans, and meeting minutes. We also interviewed MAC staff and MAC commissioners, and we attended MAC meetings. To compare the Minneapolis-St. Paul Airport's finances with other large airports, we relied primarily on information from the Federal Aviation Administration regarding spending levels and airline rates and charges.

To help us evaluate issues related to airport finance, governance, and noise, we interviewed representatives of various organizations: the Federal Aviation Administration, Minnesota Legislature, Metropolitan Council, state finance and transportation agencies, local governments, Minnesota-based airlines, and advocacy groups. We also conducted several surveys. We conducted phone surveys with officials at 22 airports to collect financial information and better understand how they responded to the events of September 11.[1] For most airports, we supplemented the survey data with information we obtained from their financial statements. We conducted phone surveys with officials at 21 airports regarding their noise mitigation programs.[2] In addition, we solicited comments about MAC's performance and governance structure from airlines that are members of MAC's Airport Affairs Committee for the Minneapolis-St. Paul Airport.[3]

We reviewed management literature regarding airport governance structures, and we collected information from web sites and other existing sources regarding the governance structures of 40 large airports. We reviewed Minnesota laws pertaining to MAC's governance, and we compared these provisions with those for state agencies and other metropolitan agencies.

Our review of MAC's finances focused largely on the Minneapolis-St. Paul International Airport, which accounts for most of MAC's revenues and expenditures. We gave little attention to issues regarding the other six airports that MAC operates. We did not evaluate the adequacy of specific airport services provided by MAC employees (such as snowplowing or building maintenance) or by vendors (such as concessions or taxi services).

Some legislators have questioned whether the Minneapolis-St. Paul Airport has sufficient capacity to meet the region's long-term needs. Nevertheless, we did not examine the adequacy of MAC's airport facilities because (1) MAC is still implementing airport expansion plans mandated by the 1996 Legislature, which decided not to authorize construction of an airport at a new site, and (2) MAC officials told us that, in the near future, they intend to once again examine long-term projections of airport capacity.

Chapter 1 of this report provides background on MAC and the Twin Cities airport system. Chapter 2 examines MAC's finances, including a review of recent trends and comparisons with other airports. Chapter 3 discusses MAC's efforts to increase airline competition at the Minneapolis-St. Paul Airport, as well as its efforts to retain Minnesota airline jobs. Chapter 4 examines MAC's noise mitigation program, and Chapter 5 examines possible changes to MAC's governance structure.

---

1 We selected a geographically-balanced sample of 17 large hub airports. We also contacted five smaller airports that we were told had made budget cuts following September 11, 2001. We collected information in July through September 2002, and we received responses from all 22 of the airports we contacted.

2 We contacted the 20 airports with the largest number of enplanements in 2000. We also contacted two smaller airports that we heard had significant noise mitigation programs. We received responses from 21 of the 22 airports during August through November 2002.

3 In July 2002, we surveyed representatives of all 24 airlines on the Airport Affairs Committee; 11 responded.

1 Background

SUMMARY

The Metropolitan Airports Commission (MAC) is a 15-member body that operates and sets policy for seven airports in the Twin Cities area. MAC's operating revenues totaled $170 million in 2001, mostly from airline charges and concessions, and MAC employed more than 500 staff. MAC's primary responsibility is operation of the Minneapolis-St. Paul International Airport. This airport accounted for 96 percent of MAC's operating expenses in 2001, and it will account for 93 percent of the $2.5 billion that MAC is spending to implement the 2010 capital plan mandated by the 1996 Legislature.

Commercial airline services are critically important to Minnesota's economy.

Commercial airline services in the Twin Cities area are critically important to the economic health of the metropolitan area, the state of Minnesota, and even the multi-state upper Midwest region. In 2001, there were more than 1.2 million take-offs and landings at the seven Twin Cities airports. Minneapolis-St. Paul International Airport alone handled 340,000 metric tons of mail and cargo in 2001, as well as 32 million passengers. These activities took place at facilities owned and operated by the Metropolitan Airports Commission, a body created 60 years ago by the Minnesota Legislature.

In this chapter, we address the following questions:

- **What is the Metropolitan Airports Commission, and what is its purpose?**
- **What are MAC's revenue sources, and how does MAC spend these revenues?**
- **How does Minneapolis-St. Paul International Airport compare in size and activity with other U.S. airports?**
- **What roles do MAC's smaller airports play in the airport system?**

METROPOLITAN AIRPORTS COMMISSION

The Metropolitan Airports Commission (MAC) owns and operates Minneapolis-St. Paul International Airport (MSP) and six smaller airports in the Twin Cities region. The 1943 Legislature gave MAC authority to operate the Minneapolis airport (Wold-Chamberlain Field), the St. Paul airport (Holman Field), and any other airports that the commission might acquire or construct.

State law defines MAC's purposes, as shown in Table 1.1.[1] In addition, MAC's most recent strategic plan, approved by the commission in April 2002, identifies five objectives: (1) to meet security mandates, (2) to develop a coordinated response plan to security events, (3) to maintain sufficient liquidity to meet operating and debt service requirements, (4) to maintain a competitive airline cost structure, and (5) to continue implementation of the 2010 Long Term Comprehensive Plan within the limits of available funding.[2] (MAC's "2010 plan" outlined a series of airport capital improvements that the 1996 Legislature authorized when it decided not to build a new major airport.)

Table 1.1: Statutory Purposes of the Metropolitan Airports Commission

- To "promote the public welfare and national security; serve public interest, convenience, and necessity; promote air navigation and transportation, international, national, state, and local, in and through this state; promote the efficient, safe, and economical handling of air commerce; assure the inclusion of this state in national and international programs of air transportation; and to those ends to develop the full potentialities of the metropolitan area in this state as an aviation center, and to correlate that area with all aviation facilities in the entire state so as to provide for the most economical and effective use of aeronautic facilities and services in that area."
- To "assure the residents of the metropolitan area of the minimum environmental impact from air navigation and transportation, and to that end provide for noise abatement, control of airport area land use, and other protective measures."
- To "promote the overall goals of the state's environmental policies and minimize the public's exposure to noise and safety hazards around airports."

SOURCE: *Minn. Stat.* (2002), §473.602.

The Metropolitan Airports Commission (MAC) is a public agency, and its revenues are public funds.

State law defines MAC as a "public corporation," and it defines all of MAC's revenues as "public funds."[3] Thus, MAC is a public agency, although it receives no state or local tax revenues and its facilities are leased mostly by private companies for the benefit of the traveling public.

The Metropolitan Airports Commission consists of 15 members. These include:

- The mayors of Minneapolis and St. Paul, or their appointees,
- Eight members appointed by the Governor, each representing 2 of the 16 Metropolitan Council districts,
- Four members from outside the Twin Cities metropolitan area, appointed by the Governor, and
- A chair, appointed by the Governor.

1 In 1991, the Legislature authorized MAC to provide financial assistance to Northwest Airlines. The Legislature set forth in law public purposes that were specific to this assistance (see *Minn. Stat.* (2002) §473.6021), including promotion of airline job creation, prevention of airline job loss, and diversification of the metropolitan tax base.

2 MAC, *2002 Operating Budget* (Minneapolis, undated), 11-13.

3 *Minn. Stat.* (2002), §473.603, subd. 1; *Minn. Stat.* (2002), §473.606, subd. 3.

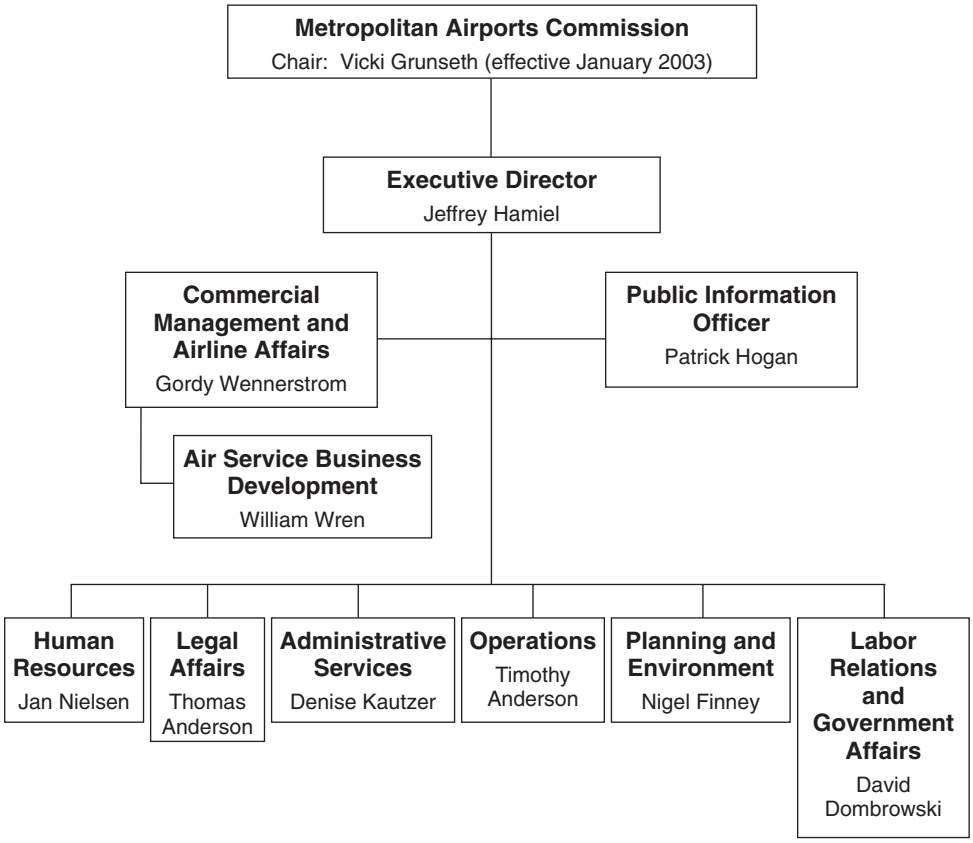
A 15-member commission appoints an executive director to oversee the work of MAC staff.

The chair receives a salary, not to exceed 25 percent of the Governor's salary, while other commission members receive $50 per diem and reimbursement of expenses.[4] State law requires the commission to meet at least once each month.[5]

The commission appoints and supervises the agency's executive director, who "shall have had experience as a business executive, preferably in connection with aviation and in the promotion of business enterprises."[6] The director serves at the pleasure of the commission, and the commission determines the director's compensation. The director cannot spend MAC funds without the commission's "general or specific directions."[7]

Figure 1.1 shows how MAC is organized. Most of MAC's top managers have extensive experience within the organization. MAC's present executive director has held this position since 1985. MAC's five deputy executive directors have

Figure 1.1: Metropolitan Airports Commission Organizational Structure, January 2003



SOURCE: Metropolitan Airports Commission.

4 *Minn. Stat.* (2002), §473.605, subd. 2; *Minn. Stat.* (2002), §15A.0815, subd. 4.

5 *Minn. Stat.* (2002), §473.604, subd. 5.

6 *Minn. Stat.* (2002), §473.606, subd. 4.

7 *Minn. Stat.* (2002), §473.606, subd. 4.

worked for the organization an average of about 24 years, and all but one have been in their current positions for more than six years. [8]

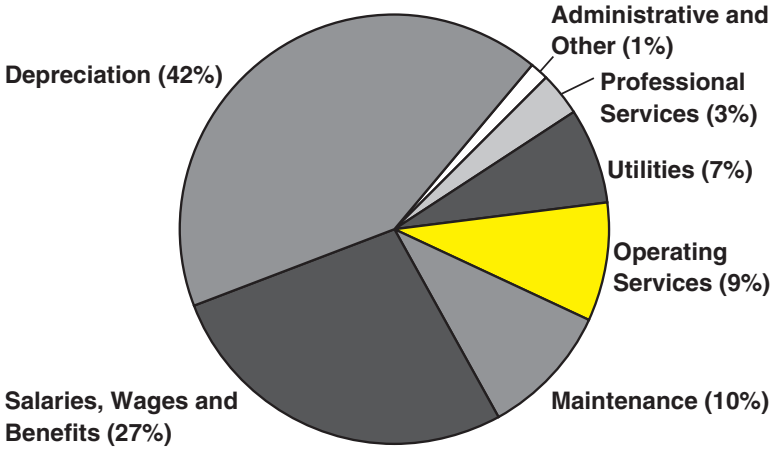
MAC's 2002 budget included funding for 567 full-time equivalent (FTE) positions.[9] As of late September 2002, MAC had about 548 FTE employees. The largest categories of MAC staff were in the following departments: maintenance (113 FTE), police (116.5 FTE), fire (46 FTE), and trades workers (40 FTE). Slightly less than half of MAC's employees are represented by labor unions.

FINANCES

Operating Budget

Figure 1.2 shows MAC's 2001 operating expenses, as represented in MAC's annual financial statement. The financial statement presents expenses on an accrual, not a cash, basis of accounting. The largest single expense category in 2001 was depreciation ($66 million), which is an accounting entry and not an actual outlay of current funds. Depreciation represents the current use of assets—such as runways and terminal buildings—that were previously constructed.

Figure 1.2: MAC's Operating Expenses, 2001



NOTE: Operating expenses totaled $156.2 million.

SOURCE: MAC, *Comprehensive Annual Report, Year Ended December 31, 2001* (Minneapolis, 2002), 54.

8 MAC has deputy executive directors for administrative services, planning and environment, labor and government affairs, human resources, and operations.

9 An additional 26.5 FTE positions are on administrative hold due to the condition of the economy and the airline industry.

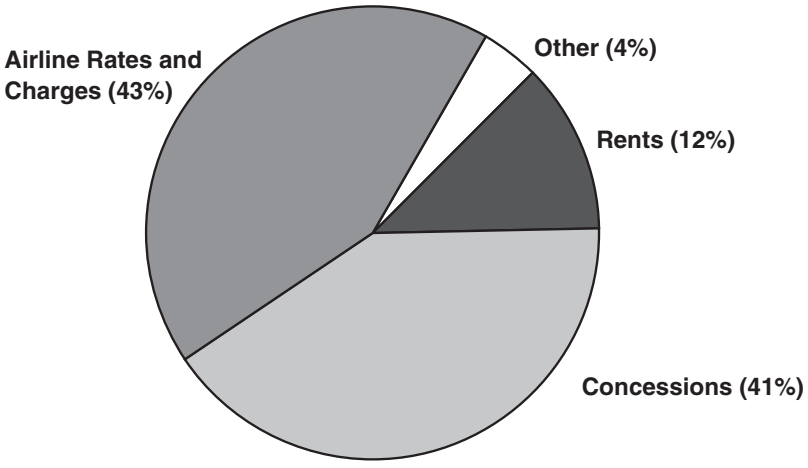
The Minneapolis-St. Paul Airport accounts for 96 percent of MAC's operating expenses.

Aside from depreciation, MAC spent $91 million in 2001 to administer the Twin Cities airport system and pay for ongoing operating costs at seven airports. Employee salaries, wages, and benefits comprised about $43 million of MAC's operating expenses. In Figure 1.2, "maintenance" expenses included MAC's costs for supplies, equipment, and parts—for instance, related to airport plumbing, lighting, and snow removal. "Maintenance" also included the cost of maintenance contracts—such as those for janitorial services and maintenance of the automated people mover at the Minneapolis-St. Paul Airport. "Operating services" included activities such as parking facility management, shuttle bus services, and storm water monitoring. "Professional services" included the cost of specialized consultants, such as architects, engineers, lawyers, auditors, information technology consultants, and public information consultants.[10] Overall, the costs of running Minneapolis-St. Paul International Airport accounted for 96 percent of MAC's operating expenses.

In 2001, MAC collected $170 million in operating revenues, according to its annual financial statement. Figure 1.3 shows MAC's sources of operating revenues for 2001. Airline rates and charges at the Minneapolis-St. Paul Airport were the largest source, providing 43 percent of the operating revenues. These rates and charges include landing fees, ramp fees, and terminal rents and charges

Figure 1.3: MAC's Operating Revenues, 2001

MAC's operating revenues totaled $170 million in 2001.



NOTE: Operating revenues totaled $170.1 million.

SOURCE: MAC, *Comprehensive Annual Report, Year Ended December 31, 2001* (Minneapolis, 2002), 54.

10 Much of MAC's architectural and engineering consultant work is in the capital budget, not the operating budget—reflecting work on specific capital projects.

paid by airlines.[11] They are calculated in accordance with legal agreements between MAC and the airlines, and they are designed to recover a portion of MAC's operating expenses and certain capital costs expended for the benefit of the airlines.

MAC's second main source of revenue in 2001 was concessions at the Minneapolis-St. Paul Airport, which provided 41 percent of operating revenues. A majority of concession revenue came from automobile parking fees at the airport. Other significant sources of concession revenue included fees charged to rental car companies and rents paid by the airport's restaurants and retail establishments. Miscellaneous sources of revenue from the Minneapolis-St. Paul Airport—including other building and land rentals and utility charges—accounted for 15 percent of MAC's operating revenues in 2001. Revenue from MAC's other six airports accounted for only about 1 percent of its revenues. MAC has authority to levy taxes on property throughout the Twin Cities metropolitan area to pay for operating costs and debt service, but it has not levied a property tax since the 1960s.[12]

MAC has used some of its operating revenues to help pay for construction projects, debt service, equipment, property acquisition, and bond account reserves.

MAC's total operating revenues ($170 million in 2001) have typically far exceeded its operating expenses excluding depreciation ($91 million in 2001). MAC has used the balance (plus interest earnings on its operating revenues) to help pay for construction projects, debt service, equipment purchases, property acquisitions, and bond account reserves. For instance, MAC transferred $50 million in operating revenues in 2001 to help make debt service payments (which totaled $88 million in 2001). In 2000, MAC transferred $47 million in operating revenues to help pay for construction projects, but it made no such transfer in 2001.[13]

Capital Spending

Presently, MAC is significantly expanding and improving airport facilities, as directed by the 1996 Legislature.[14] The basis for the expansion is MAC's 2010 Long Term Comprehensive Plan, which includes about $2.5 billion in proposed capital expenditures (93 percent for the Minneapolis-St. Paul Airport and 7 percent for the other MAC airports). At the Minneapolis-St. Paul Airport, the plan includes construction of a new runway, expansion of the terminal and parking facilities, noise mitigation activities, and various other projects.

11 MAC sets *landing fees* to recover the full cost of MAC's airfield and runway operations (including a share of administrative overhead), and they are assessed to airlines based on the actual gross weight of planes landing at the airport. MAC sets *ramp fees* to recover the full cost of ramp (or apron) space outside the terminal, and airlines pay fees based on their lineal feet of ramp space. Airlines pay *terminal rents and charges* in proportion to the amount of terminal space they occupy; however, the rates are not set at levels that recover the costs of the entire terminal. Other MAC revenues—such as those from parking and concessions—also support terminal costs.

12 MAC last levied a tax on property throughout the metropolitan area for operating purposes in 1961. It last levied a property tax to pay debt service in 1969.

13 MAC's annual financial statements show the difference between operating expenditures (*including* depreciation) and operating revenues. This difference is often called MAC's "operating income" or "net revenue," although depreciation does not represent an actual outlay of current funds. MAC's net revenues averaged about $20 million from 1996 to 2001, but they were about $14 million in 2001 and are projected to be less than $4 million in 2002.

14 *Laws of Minnesota* (1996), ch. 464, art. 3, sec. 6 required MAC to implement its 2010 long-term comprehensive plan for MSP.

MAC has issued $1.3 billion in bonds to support its current capital development plan.

Funding for MAC's capital projects comes from a number of sources. Bonds have provided the largest source of funding for the 2010 plan. Since May 1998, MAC has issued about $1.3 billion in airport revenue bonds to support the plan. In addition, MAC staff estimate that the 2010 plan will use more than $900 million in "passenger facility charges," about $300 million in state and federal grants, and more than $200 million from MAC operating funds.[15] The current passenger facility charge is $4.50 per passenger boarding an airplane at MSP. This charge, which was approved by the Federal Aviation Administration, is the maximum permitted under federal law.

Ultimately, the airlines using Minneapolis-St. Paul Airport will pay a portion of the costs of the 2010 plan. Excluding costs financed using state or federal grants or passenger facility charges, a share of the remaining capital costs will be billed to the airlines over a period of time. The airlines' share of the remaining costs depends on their use of facilities. For example, airlines are responsible for all airfield and runway costs. In contrast, they pay for only the portion of the terminal facilities that they use.

MAC is implementing a large-scale capital improvement program, as required by the Minnesota Legislature.

Projects in the 2010 plan costing $1.7 billion are underway or have already been completed, according to MAC estimates, but a significant portion of the plan will be undertaken in the next several years. MAC's capital improvement plan includes projects totaling almost $900 million over the years 2003-2008. MAC expects that it will spend more during this period than was previously expected because it deferred some projects following the terrorist attacks on September 11, 2001. Mostly through delaying projects, MAC reduced its 2001 capital budget by $118 million, and it reduced its 2002 capital budget by $295 million.

15 The total amount of funds available is more than the estimated costs of the 2010 Plan. This occurs because not all of the funds raised from bonds are available to pay construction costs. Some of the funds borrowed must be used to pay bond issuance costs and capitalized interest and to provide necessary debt service reserves.

MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT

Among U.S. airports, Minneapolis-St. Paul Airport (MSP) has the seventh largest number of arriving and departing planes.

MAC's principal responsibility is the operation of Minneapolis-St. Paul International Airport (MSP). This airport was known as Wold-Chamberlain Field when MAC was created in 1943, but it was given its current name in 1948.[16] Today, MSP is one of the largest airports in the United States in terms of its aircraft and passenger activity. According to a leading airports association, MSP ranked 7th in the nation in the number of aircraft "operations" (arrivals and departures) during 2001 and 10th in the total number of passengers. MSP also ranked 19th in the amount of cargo handled during 2001.[17]

The high levels of activity at MSP are largely due to the hub operated by Northwest Airlines (NWA). NWA flies many passengers into MSP where they switch planes and leave for their final destinations. NWA, like most large airlines, finds it more profitable to operate hub operations than to fly passengers directly to their destinations. In recent years, about half of the passengers departing MSP were *connecting* passengers whose flights started elsewhere, while the other half were *originating* passengers whose flights began at MSP. In 2001, about 74 percent of the passengers departing from MSP flew with Northwest Airlines. Altogether, however, the airport is served by 17 domestic airlines that provide scheduled service, 4 domestic airlines that provide non-scheduled (or "charter") service, 4 international airlines, and 11 airlines that provide cargo services.

During the 1990s, passenger and aircraft activity at MSP grew considerably. From 1990 to 2000, the number of paying passengers departing MSP grew 83 percent, while the number of aircraft operations increased 36 percent.[18] But the terrorist attacks of September 11, 2001—along with the recession that began in early 2001—caused activity levels to fall during 2001. The number of paying passengers departing MSP fell 9 percent in 2001, while the number of operations decreased 4 percent.[19] The declines continued during the first nine months of 2002. Paying passengers for the first nine months of 2002 decreased 5 percent from the levels during the first nine months of 2001, while aircraft operations were down only 1 percent from 2001. The 1989 Legislature adopted a "dual track" airport planning process—to simultaneously consider the options of expanding the existing airport and relocating the airport to a new site.[20] The Metropolitan Council, which conducts long-range planning for the Twin Cities metropolitan area, examined possible locations for a new airport in Dakota, Scott, and Anoka counties. The council, MAC, and the U.S. Federal Aviation

---

16 The airport's first landing strip and hangar were built in 1920. Initially called Speedway Field (after the racing track that was previously at this site), the airport was renamed Wold-Chamberlain Field in 1923 to honor two World War I pilots.

17 Airports Council International-North America, "Stats & Surveys: Traffic Statistics" (http://www.aci-na.org/asp/traffic.asp?page=90; accessed November 25, 2002).

18 Examples of "non-paying" passengers include persons whose flights are provided without charge due to a frequent flier program and airline employees whose travel is paid for by the airline.

19 Cargo shipments from MSP have shown less growth. Available data on tons of enplaned cargo go back to 1992 and show a growth of 20 percent from 1992 to 2000. Cargo shipments dropped 11 percent, however, in 2001.

20 *Laws of Minnesota* (1989), ch. 279.

The number of passengers at MSP increased 83 percent from 1990 to 2000, then declined 9 percent in 2001.

Administration all developed forecasts for aviation activity at MSP. After years of study and discussion, the 1996 Minnesota Legislature decided to keep the airport at its present location.

MSP's fourth runway is scheduled for completion in late 2004.

Presently, planes at MSP use three runways, with lengths of 11,006, 10,000, and 8,200 feet. A new 8,000 foot runway is scheduled for completion in late 2004. In addition, MAC operates two terminals at MSP: the Lindbergh Terminal (with 2.6 million square feet of space) and the Humphrey Terminal (395,000 square feet).

In recent years, MAC has received various awards from trade associations for the Minneapolis-St. Paul International Airport. For example, the International Air Transport Association named MSP the best large North American Airport for "overall customer satisfaction" for 1999, 2000, and 2001, based on customer surveys. The airport has also won awards for specific aspects of its operations—such as snow and ice control, concessions, and building design. In general, airline officials whom we contacted were more positive than negative about MSP facilities and MAC's management of them.

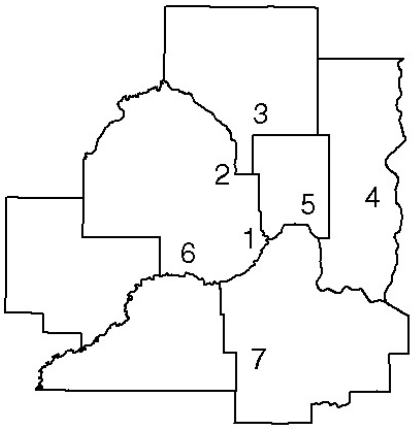
RELIEVER AIRPORTS

In the seven-county Twin Cities metropolitan area, the Federal Aviation Administration has designated seven airports as "reliever airports" for Minneapolis-St. Paul International Airport. Reliever airports are supposed to relieve congestion at a commercial airport and provide improved access for "general aviation" aircraft.[21] Figure 1.4 shows the location of the six reliever airports operated by MAC. A seventh reliever airport is operated by the city of South St. Paul.[22]

21 The term "general aviation" usually refers to aviation other than scheduled commercial passenger transport flights and military flights. It can include business, recreation, training, and emergency medical flights, among others.

22 State law formerly allowed cities to determine whether their airports would be MAC-operated airports. At that time, South St. Paul decided to retain ownership of the airport.

Figure 1.4: MAC Airports in the Seven-County Metropolitan Area



1 Minneapolis-St. Paul International
2 Crystal
3 Anoka County/Blaine
4 Lake Elmo
5 St. Paul Downtown
6 Flying Cloud
7 Airlake

SOURCE: Metropolitan Airports Commission.

Although the reliever airports do not serve anywhere near the number of passengers served at MSP, they provide a vital service by accommodating the needs for private and corporate flights, recreational flying, flight training, military operations, and medical evacuations. As shown in Figure 1.5, there were about 757,000 operations at MAC's reliever airports in 2001, down from 923,000 in 1994. Federal restrictions on general aviation aircraft significantly reduced operations at the reliever airports for several weeks following the September 11, 2001 terrorist attacks, and flooding temporarily closed the St. Paul Downtown Airport in mid-2001. The total number of operations at MAC's reliever airports exceeded the number of MSP operations by more than 100 percent in the early 1990s, compared with 62, 58, and 51 percent during the past three years.

Six MAC-operated reliever airports divert some traffic from MSP.

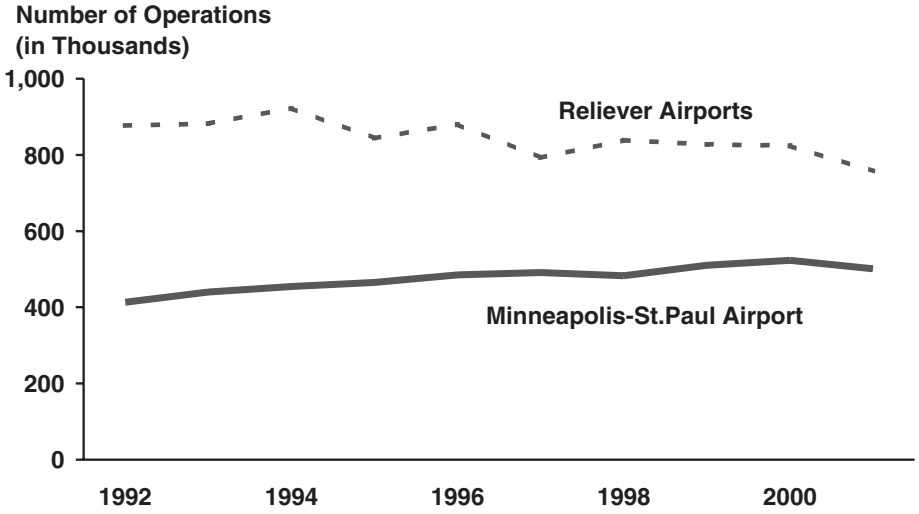
While MAC cannot prevent small planes and corporate jets from using MSP, the reliever airports provide pilots with alternative take-off and landing sites. The diversion of such aircraft helps to limit delays at MSP and reduce expenses for airline companies using MSP. The 1996 Legislature required MAC to "develop and implement a plan to divert the maximum feasible number of general aviation operations" from MSP to reliever airports.[23] There is no single MAC document that constitutes the required plan. Instead, MAC tries to entice pilots to use the reliever airports with capital improvements and "relatively low user charges."[24] For instance, MAC is currently proceeding with plans to lengthen one runway at Flying Cloud Airport and one runway at Anoka County-Blaine Airport to 5,000 feet, which would allow these airports to serve newer corporate jets. Table 1.2 shows the length of the longest paved runway at each of the reliever airports. MAC staff told us that most corporate jet pilots prefer to have runways of at least

23 Minn. Stat. (2002), 473.608, subd. 27.

24 MAC, *Comprehensive Annual Financial Report for the Year Ended December 31, 2001* (Minneapolis, May 2002), 20.

Over the past decade, MSP's traffic increased while traffic at the reliever airports declined.

Figure 1.5: Total Operations at Reliever Airports and MSP, 1992-2001



SOURCE: MAC, *Comprehensive Annual Report, Year Ended December 31, 2001* (Minneapolis, 2002), 68-69.

Table 1.2: MAC Reliever Airports' Runway Characteristics and 2000-01 Operations

Reliever Airport	Number of Paved Runways	Length of Longest Runway (feet)	Number of Operations (Arrivals and Departures) 2000	Number of Operations (Arrivals and Departures) 2001	Percent of All Reliever Airports' Operations 2000	Percent of All Reliever Airports' Operations 2001
Airlake	1	4,098	76,418	70,229	9.3%	9.3%
Anoka County/Blaine	2	4,855	156,546	136,892	19.0	18.1
Crystal	3	3,266	176,554	156,801	21.4	20.7
Flying Cloud	3	3,909	186,078	185,593	22.6	24.5
Lake Elmo	2	2,850	70,687	64,962	8.6	8.6
St. Paul Downtown	3	6,711	157,788	142,794	19.1	18.9
TOTAL	14		824,071	757,271	100.0%	100.0%

SOURCE: Metropolitan Airports Commission and http://www.airnav.com; accessed December 11, 2002.

5,000 feet; presently the St. Paul Downtown Airport is the only reliever airport with such a runway.

MAC subsidizes the operation of its reliever airports with revenue from parking and other concessions at MSP. In 2001, the operating subsidy for the reliever airports was $1.8 million (excluding depreciation charges). The subsidy has decreased from $2.5 million in 1997 due to increases in user charges put into effect by MAC beginning in 1999. In addition, MAC uses revenue from MSP to pay for capital rehabilitation and improvement projects at the reliever airports. The depreciation expense for MAC's reliever airports was $2.6 million in 2001.

2 Financial Issues

SUMMARY

Operating costs for Minneapolis-St. Paul International Airport are low in comparison with other large hub airports across the United States. In addition, the Metropolitan Airports Commission appears to have exercised more fiscal restraint than most other airports did in response to the events of September 11, 2001. We are concerned, however, that commission staff initially proposed a 12 percent increase in operating expenses, excluding depreciation, for 2003. Although the commission ultimately reduced the increase to less than 6 percent and used 2002 operating income to keep airline charges from increasing, we think that the staff proposal was out of step with the financial distress being experienced in the airline industry. While some increase in the budget may be needed due to increased costs and the expansion of the airport, we do not feel MAC staff provided a convincing case for the increase. MAC also needs to focus attention on its concession revenues. Available data suggest that the commission is currently receiving rents from food, beverage, and retail concessionaires that are about one-fourth lower than those at other large airports.

Immediately following the terrorist attacks on September 11, 2001, passenger traffic at airports across the country dropped dramatically. The nation's major airlines, which had already been losing money due to the recession, suffered dramatic financial losses. Both the federal government and airport authorities came under pressure to improve airport security and provide financial relief to the airlines. The United States Congress passed legislation to provide $5 billion in financial grants to the airline industry and instituted a ticket tax to pay for mandated security improvements at the nation's airports.

The financial crisis in the airline industry has brought increased interest in MAC and its budget.

In Minnesota, legislative committees held hearings to discuss the impact on airline companies headquartered in the state and on the workers that had been laid off. The Metropolitan Airports Commission (MAC) implemented a hiring freeze and reduced its operating budget for 2002. MAC also postponed a large portion of the capital projects planned for 2002, as well as some projects scheduled for the remainder of 2001.

Some legislators were disappointed, however, with MAC's responsiveness to the financial crisis in the airline industry. The 2002 Legislature considered changes to bring MAC and its budget under greater legislative scrutiny. Although legislation

did not pass during the 2002 legislative session, questions remain about MAC's finances. This chapter attempts to address some of those questions. In particular, we examine the following issues:

- **How have the costs of operating the Minneapolis-St. Paul International Airport (MSP) changed over the last decade? How does MSP compare with other airports in terms of its operating costs and airline rates and charges?**

- **How did the Metropolitan Airports Commission respond through its operating budget to the financial distress in the airline industry following the terrorist attacks on the United States in September 2001? How did MAC's response compare with those of other large airports across the nation? In preparing a 2003 budget, has MAC been appropriately responsive to the needs of the airline industry?**

- **How did the Metropolitan Airports Commission change its capital budget in response to the financial crisis in the airline industry? How well has MAC controlled the costs of implementing the 2010 plan for expanding the Minneapolis-St. Paul International Airport?**

- **How do the revenues raised by MAC from sources other than airlines compare with those raised at other large airports across the country? Are there ways for MAC to enhance non-aeronautical revenues such as concession revenues?**

TRENDS AND COST COMPARISONS

Airports are often compared by examining airport operating costs and the amounts they charge airlines.

In the airline industry, two measures are often used to examine airport cost trends and compare airports. The measure most frequently used is the rates and charges airlines pay to an airport per "enplaned" passenger.[1] For airports, this measure reflects the revenues raised from airlines, which are typically based on portions of both the airport's operating costs and its prior capital investments. The airline cost per enplanement is generally higher for airports that have undertaken large capital projects in recent years. The cost per enplanement can also be higher for airports that are less efficiently operated.

A second measure is the airport's operating costs per enplaned passenger. Operating costs include all operating expenses except depreciation. This measure focuses on how efficiently an airport is operated regardless of how operations are financed. It also excludes any consideration of capital costs.

1 An airport's "enplaned" passengers—or enplanements—represent the number of passengers departing on flights from that airport.

Airline Rates and Charges

Generally,

- **Airline rates and charges per enplaned passenger have been low at Minneapolis-St. Paul International Airport compared with other large hub airports.**

According to data obtained from the Federal Aviation Administration (FAA), the airlines' cost per enplanement at MSP was 43 percent below the average cost at large hub airports in the United States in 2000.[2] Because costs at a few airports were considerably higher than those at others, it is also useful to compare MSP's costs to the median cost figure. Table 2.1 shows that the airline cost per enplaned passenger at MSP was 12 percent below the large hub median in 2000 and was the 23rd highest among the 31 airports classified as large hub airports. Only eight other large hub airports had lower airline charges per passenger. Landing fees at MSP were only slightly below the median for large hub airports, but the terminal rents charged by MSP were more than 50 percent below the median and were the 4th lowest among the 31 airports.

In 2000, airline costs per passenger at MSP were lower than those at two-thirds of the nation's large airports.

Table 2.1: Airline Rates and Charges per Enplanement, MSP Compared With Other Large Hub Airports, FY 2000

Type of Charge	MSP	Large Hub Average	Percentage Difference From Average	Large Hub Median	Percentage Difference From Median	MSP's Rank
Landing Fees	$2.34	$2.99	-22%	$2.47	-6%	17th highest of 31
Terminal Fees	1.36	3.65	-63	2.89	-53	28th highest of 31
Other Charges	0.84	1.30	-35	0.92	-8	18th highest of 31
Total Rates and Charges	$4.53	$7.94	-43%	$5.13	-12%	23rd highest of 31

SOURCE: Office of the Legislative Auditor's analysis of data from the Federal Aviation Administration.

Data from the Metropolitan Airports Commission also show that the growth in airline payments during the 1990s was roughly consistent with the growth in passengers at MSP and nationwide inflation. Although airline payments at MSP grew more than 150 percent from 1990 to 2000, the airline cost per enplanement at MSP grew only 6 percent during that period when adjusted for inflation.[3]

Nationwide data for 2001 are not yet available for airport comparison purposes, but data from MAC indicate that costs per enplanement increased significantly at

2 The Federal Aviation Administration defines a large hub airport as one that has one percent or more of the nation's total enplaned passengers. For 2000, airports with 7,102,994 or more enplaned passengers were classified as large hub airports.

3 We adjusted for inflation using the implicit price deflator for state and local government expenditures published by the U.S. Department of Commerce. This price index increased 33 percent between 1990 and 2001.

MSP in 2001. The airline cost per enplaned passenger rose 17 percent during 2001. Close to three-fourths of this increase can be explained by inflation and the largely unanticipated decline in passengers in 2001. The remainder of the increase reflects growth in MSP's operating costs and the early stages of implementation of its 2010 plan for expanding the airport. It remains to be seen how MSP will compare with other airports for 2001. The decline in passengers at MSP during 2001 appears to have been about average for large hub airports, but it is unclear at this time how MSP's growth in airline costs compared with other airports.

In future years, airline costs per enplaned passenger are likely to grow at MSP. Metropolitan Airports Commission staff have projected that airline costs per enplanement will increase 41 percent between 2001 and 2010.[4] This expected growth is due in large part to the planned expansion of the airport. How this growth will affect MSP's relative rank among large hub airports is unknown, since other airports may also be undertaking significant capital projects.

Airport Operating Costs

It is also useful to track trends and compare airports using an airport's operating costs per enplaned passenger. In this regard,

- **MSP has typically had relatively low operating costs per enplaned passenger.**

In 2000, airport operating costs per enplaned passenger were 44 percent below the average for large hub airports. As Table 2.2 shows, MSP's operating costs per enplanement were the fifth lowest among the 31 airports and 37 percent below the median cost for large hub airports. This figure indicates that MAC has generally run an efficient operation at MSP in comparison with most other large airports.

In 2000, only about one-eighth of the nation's large airports had lower operating costs per passenger than those at MSP.

Table 2.2: Airport Operating Expenses per Enplanement, MSP Compared With Other Large Hub Airports, FY 2000

Type of Expense	MSP	Large Hub Average	Percentage Difference From Average	Large Hub Median	Percentage Difference From Median	MSP's Rank
Personnel Expenses	$2.35	$3.14	-25%	$2.57	-9%	18th highest of 31
Non-Personnel Expenses	2.43	5.39	-55	5.22	-53	26th highest of 31
Total Operating Expenses	$4.78	$8.53	-44%	$7.56	-37%	27th highest of 31

SOURCE: Office of the Legislative Auditor's analysis of data from the Federal Aviation Administration.

4 This projection was not adjusted for inflation that may occur during that period of time. The growth in enplaned passengers was also conservatively estimated—6 percent between 2000 and 2010. Enplanements for 2002 are currently running ahead of estimates.

Between 1990 and 2001, MAC's operating costs, excluding depreciation, grew 130 percent—from $39.4 million to $90.6 million.[5] Roughly half of the increase was due to increased spending on employee salaries and benefits. Between 1990 and 2001, the number of staff at MAC grew close to 50 percent. Much of that increase occurred between 1993 and 2001—a period for which data on the type of staff added are available. Table 2.3 indicates that a significant portion of the increase in staff occurred in the following areas: maintenance and trades, police

Between 1993 and 2001, the number of staff at MAC grew 42 percent.

Table 2.3: Number of Full-Time Equivalent Staff at the Metropolitan Airports Commission, 1993-2001

Department	1993	1997	2001	Change in Number of Staff, 1993-2001	Percentage Change, 1993-2001
Administrative Functions					
Executive/Commissioner	3	3	3	0	0%
Deputy Planning	2	2	2	0	0
Deputy Administrative Services	3	3	4	1	33
Deputy Human Resources	10	14	15	5	50
Public Affairs	3	3	3	0	0
Air Service-Business Development	0	3	2.5	2.5	N/A
Airport Insurance/Safety	2	3	3.5	1.5	75
Airport Development/Building Official	9	10	20	11	122
Finance/Purchasing	19	18	21	2	11
Internal Audit	0	2	2	2	N/A
Information Systems	7	6	16	9	129
Legislative and Labor Relations	3	3	4.5	1.5	50
Commercial Management/ Airline Affairs	5	4	9	4	80
General Counsel	4	4	7	3	75
Subtotal: Administrative Functions	70	78	112.5	42.5	61%
Operations					
Deputy Operations	4	2	2	-2	-50
Airport Director's Office	7	5	5	-2	-29
Conference Center	0	0	5.5	5.5	N/A
Airside Operations	8	9	12	4	50
Communications	9	11	14	5	56
Landside Operations	3	17	26.5	23.5	783
Fire	37	38	45	8	22
Police	73	73	94	21	29
Aviation Noise/Environment	15	13	12	-3	-20
Airline Operations/Facilities	1	1	2	1	100
Lindbergh Terminal Facilities	16	11	14	-2	-13
Energy Management Center	12	13	17	5	42
Trades	24	28	35	11	46
Maintenance	73	84	113	40	55
Reliever Airports	27	27	28	1	4
Subtotal: Operations	309	332	425	116	38%
Totals	379	410	537.5	158.5	42%

SOURCE: Metropolitan Airports Commission.

5 After adjusting for inflation, the increase in operating expenses (excluding depreciation) was 73 percent between 1990 and 2001.

and fire, and airport capital development. In addition, MAC increased its staff when it took on new areas of responsibility in the landside operations area and in its new conference center.[6] The other half of the growth in spending resulted from increased expenditures on utilities, maintenance parts and supplies, and operating services such as the management of parking facilities and the provision of shuttle bus services.

MSP's inflation-adjusted operating costs per passenger have not increased much since 1990.

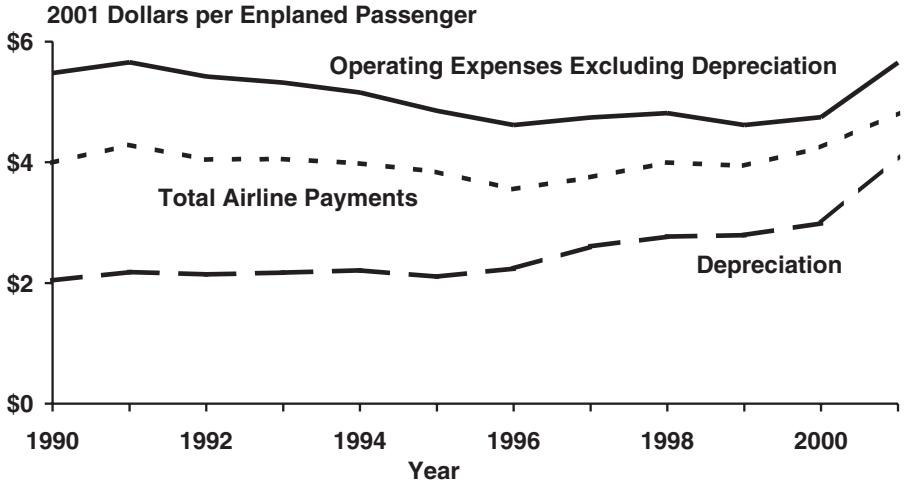
The increased use of the airport and the expansion of airport facilities, as well as inflation, have played a role in increasing the costs of operating the Minneapolis-St. Paul International Airport. Between 1990 and 2001, the number of enplaned passengers at MSP grew 67 percent while the number of aircraft operations—or aircraft arrivals and departures—increased 31 percent. In fact:

- **The operating costs per enplaned passenger at MSP—when adjusted for inflation—increased only 3 percent from 1990 to 2001.**

As Figure 2.1 shows, inflation-adjusted operating costs per enplaned passenger were generally decreasing until 2001. They fell 13 percent between 1990 and 2000. But, in 2001, a 12 percent increase in operating expenses along with a 9 percent decrease in enplanements caused operating costs per enplanement to rise 19 percent after adjusting for inflation.

Costs per enplanement may fall slightly during 2002 when adjusted for inflation. MAC decreased its operating budget for 2002 by 6 percent. Through September

Figure 2.1: MAC Operating Expenses, Depreciation, and Airline Payments per Enplaned Passenger (in 2001 Dollars), 1990-2001



SOURCE: Office of the Legislative Auditor's analysis of data from the Metropolitan Airports Commission.

6 Landside staff oversee parking facilities, ground transportation including taxi permitting and starting, commercial vehicle access, and contracted shuttle bus services. They also monitor usage of MSP roadways and the transit hub and provide the traveling public with information and assistance at the airport.

2002, enplanements were about 5 percent below 2001 levels. Data are not yet available to show how MSP's operating costs per enplanement during 2001 and 2002 compared with other large airports, but many of those airports also experienced a drop in passengers.

OPERATING BUDGET

In this section, we examine how MAC adjusted its operating budget following the events of September 11, 2001, which caused passenger traffic and operations at the Minneapolis-St. Paul International Airport to decline significantly. We also compare MAC's response to those of other airports.

MAC Response to September 11th

During 2001, MAC implemented a partial hiring freeze and reduced non-essential spending.

Even prior to the events of September 11, 2001, the Metropolitan Airports Commission was facing significant budget problems for 2001. Passenger traffic and operations at MSP were down due to the economic downturn. As a result, MAC revenues were below expectations. In addition, actual expenditures were exceeding budgeted amounts, due in part to heavy snowfall during early 2001 and large increases in utility costs. MAC implemented a hiring freeze on non-essential staff positions, curtailed travel, directed managers to minimize consultant spending, and canceled or delayed purchases of equipment. Following September 11, 2001, MAC continued to seek ways to reduce and control its spending during 2001. Ultimately, MAC's operating expenses—not including depreciation—were $90.6 million for 2001. This figure was lower than feared early in the year but still higher than the original budget of $88.6 million.

Following the events of September 11, 2001, MAC also reworked its proposed budget for 2002. In December 2001, MAC adopted a budget of $85.4 million (excluding depreciation), which was a reduction of close to 6 percent from actual spending in 2001.[7] The budget included no increase in the number of full-time equivalent staff and no salary increases for non-unionized employees for the first six months of 2002. As Table 2.4 shows, actual spending reductions were budgeted in every major area. The overall operating budget increased 4 percent because depreciation expenses grew 17 percent. We think it is appropriate to exclude depreciation when examining MAC's efforts to control operating costs, since it simply reflects the amount of past capital project activity. MAC's efforts to control its capital project costs are discussed later in this chapter.

It appears that MAC's actual spending during 2002 will be close to the amount budgeted. MAC approved a 3 percent wage increase for non-unionized employees effective July 1, 2002, due to better than expected revenues from parking and other concessions. Actual spending for the year was projected at the end of November 2002 to be about equal to budgeted expenses, while revenue was expected to exceed the budgeted level by close to 4 percent.

7 It should be noted, however, that the 6 percent reduction in 2003 operating expenses (excluding depreciation) followed a 12 percent increase in 2002.

MAC reduced its operating expenses (excluding depreciation) by 6 percent in 2002.

Table 2.4: Operating Expenses (in $1,000s) for the Metropolitan Airports Commission, 2000-2002

Type	2000	2001	Percentage Change: 2000-01	2002 Budget	Percentage Change: 2001-02
Personnel	$ 39,814	$ 42,627	7%	$ 41,581	-2%
Administrative	1,686	1,708	1	1,172	-31
Professional Services	6,357	5,177	-19	3,954	-24
Utilities	8,678	11,208	29	10,755	-4
Operating Services	11,971	14,113	18	12,925	-8
Maintenance	12,238	15,250	25	14,343	-6
Other	278	521	87	623	20
Subtotal: Operating Expenses Excluding Depreciation	$ 81,022	$ 90,604	12%	$ 85,353	-6%
Depreciation	$ 51,028	$ 65,647	29%	$ 76,518	17%
Total Operating Expenses	$132,050	$156,251	18%	$161,871	4%

SOURCE: Metropolitan Airports Commission.

In October 2002, MAC staff released a proposed budget for 2003 that was significantly higher than the 2002 budget. The proposal included an overall increase of 10 percent and an increase of 12 percent for operating expenses excluding depreciation. Airline representatives were displeased with the size of the increase at a time when airlines are continuing to lose money and cut costs and personnel. They proposed a budget with no increase in operating expenses excluding depreciation. At the direction of MAC's Finance Committee, MAC staff is working to reduce the size of the budget increase. We discuss the proposed 2003 budget later in this chapter.

Comparison With Other Airports

To place MAC's budget reduction efforts in perspective, we contacted a number of airports to see how MAC's response to the airline industry's financial distress compared with those elsewhere. Our sample of airports included 22 airports from various regions of the United States. For the most part, our sample consisted of large hub airports, but we also included five medium hub airports that we were told had made significant budget cuts. In comparing airports, it is important to understand that airports experienced somewhat different trends in passengers and operations as a result of the recession and the events of September 11, 2001. Data suggest, however, that experience at MSP is similar to that of airports in our sample. From 2000 to 2001, the number of passengers at the Minneapolis-St. Paul International Airport declined 7 percent, according to Airports Council International-North America. The decline at MSP is nearly identical to the median decline for airports in our sample (6 percent), although their experience ranged from a decline of 13 percent to an increase of less than 1 percent. Aircraft operations declined 4 percent at MSP between 2000 and 2001 compared with a median decline of 5 percent among airports we contacted. The change in operations ranged from a 12 percent decline to a 2 percent increase.

In analyzing the fiscal response of airports to the events of September 11, 2001, we focused on airport operating expenses (excluding depreciation). We relied as much as possible on actual spending and used budgeted amounts only for any fiscal year not yet completed. We found that airports often reported they made budget cuts when, in fact, they only reduced spending from a proposed budget and actually increased spending from the amount spent during the previous fiscal year.

As Table 2.5 shows, we found:

- **MAC reduced its operating expenses more than most other airports did during fiscal year 2002.**

MAC has shown more fiscal restraint than most other airports.

Table 2.5: Change in Operating Expenses (Excluding Depreciation) at U.S. Airports, FY 2001-02

Airport	Percentage Change
Detroit	25%
Houston	23
Newark	14
Chicago-Midway	13
Philadelphia	10
Memphis	10
Milwaukee	8
Miami	8
Dallas/Ft. Worth	5
Chicago-O'Hare	1
Cleveland	0
Tampa	0
Seattle	-2
St. Louis	-4
Denver	-4
Boston	-5
Atlanta	-6
Minneapolis-St. Paul	**-6**
Los Angeles	-7
Jacksonville	-11

SOURCE: Office of the Legislative Auditor's phone survey of airports, July-September 2002.

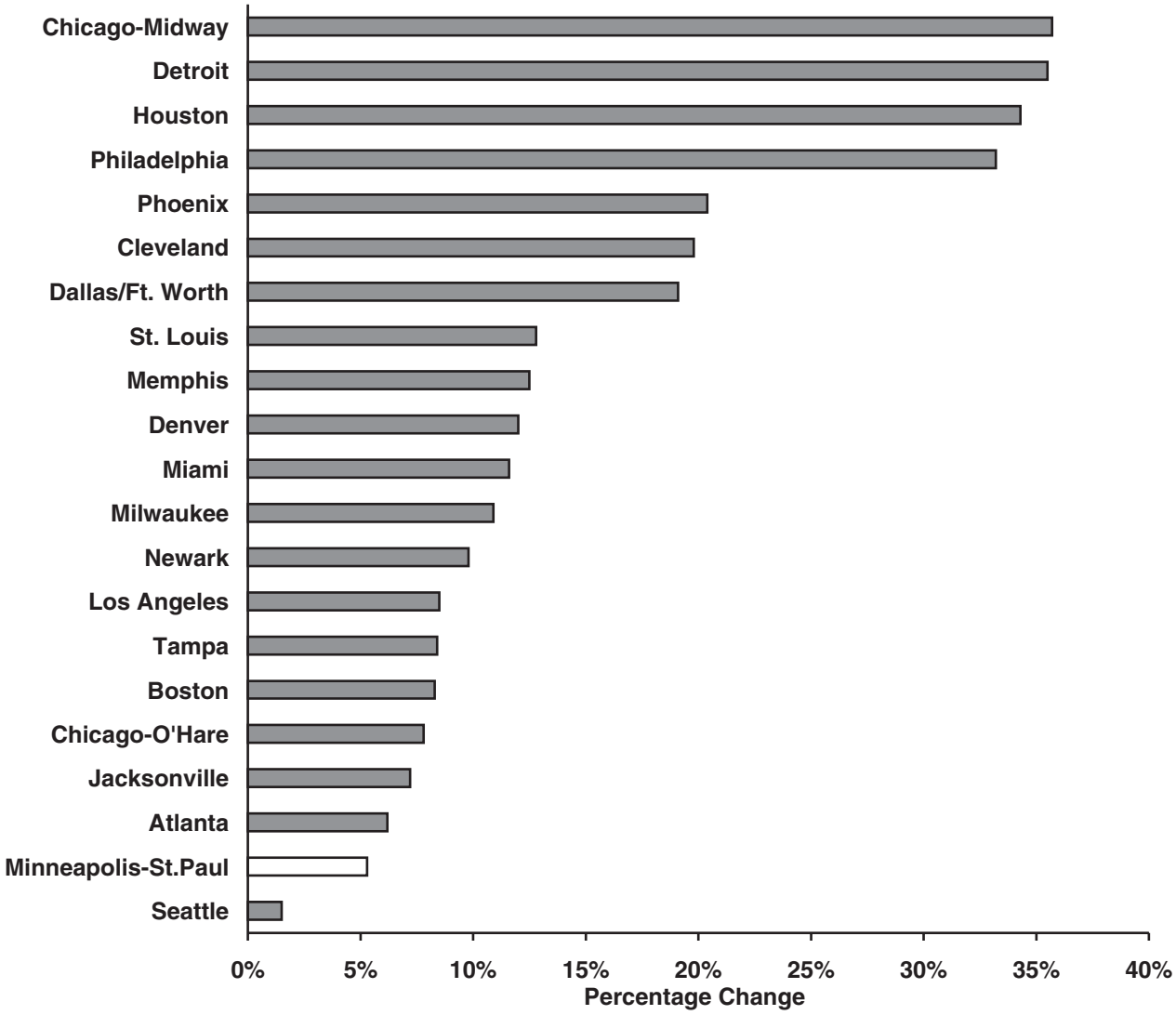
Only two airports reduced their operating expenses more than MAC did from fiscal year 2001 to fiscal year 2002. Jacksonville reduced its operating expenses (excluding depreciation) by 11 percent, and Los Angeles International Airport reported a spending reduction of 7 percent. The Atlanta airport reduced its expenses by 6 percent—the same reduction made by MAC—while six other airports reported smaller reductions. Of the 19 airports providing sufficient information, the median budget change was a 1 percent increase.

Because MAC significantly increased its operating expenditures in 2001, we also examined the rate of growth in spending over a two-year period. We compared the spending increase at MAC between 2000 and 2002 with spending increases at other airports. Even then, MAC's increase of 5 percent over a two-year period was less than the increases of all but one of the airports in our sample. (See Figure 2.2.) The increase at Seattle's airport was only 2 percent, while the median

increase for our sample of airports between fiscal years 2000 and 2002 was 12 percent.

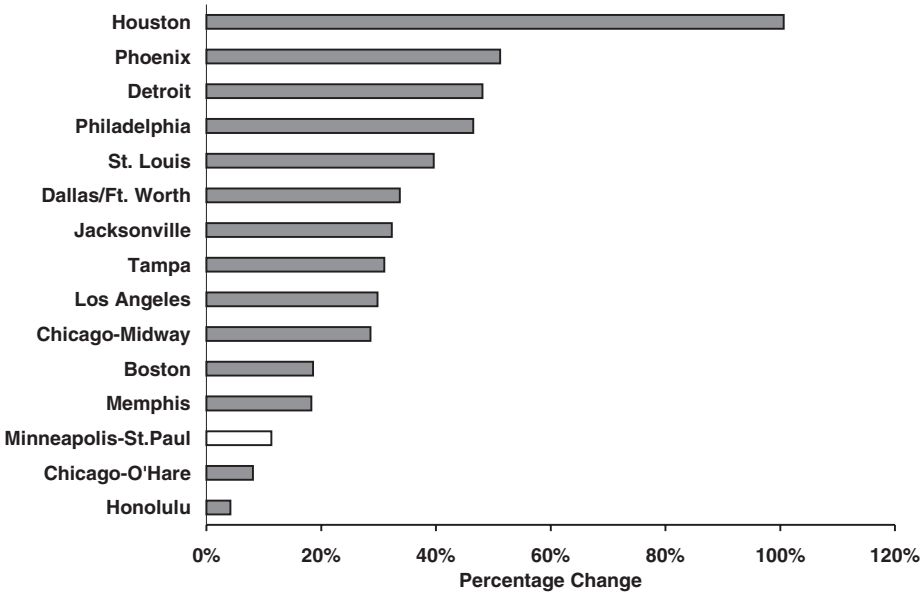
In light of the large increase MAC staff initially proposed for 2003, we also compared increases between fiscal years 2000 and 2003. In comparing increases, we used the 6 percent increase ultimately adopted by the commission for 2003. As Figure 2.3 shows, only 2 of the 14 airports responding to our survey had lower increases in spending over this three-year period. MAC's increase totals 11 percent over that period, while the median increase at other airports is 32 percent.

Figure 2.2: Change in Operating Expenses (Excluding Depreciation) at U.S. Airports, FY 2000-02



SOURCE: Office of the Legislative Auditor's phone survey of airports, July-September, 2002.

Figure 2.3: Change in Operating Expenses (Excluding Depreciation) at U.S. Airports, FY 2000-03



NOTE: The change for MSP is based on the commission's adopted budget for 2003.

SOURCE: Office of the Legislative Auditor's phone survey of airports, July-September 2002.

We also examined some of the more detailed ways in which MAC and other airports responded in their spending and employment to airline industry financial problems. Like 82 percent of the airports responding to our inquiries, MAC instituted a hiring freeze. Most exempted security employees, and some also exempted other essential employees; MAC exempted security and other essential employees. The hiring freeze is still in effect at MAC, but it is no longer in effect at 39 percent of the airports that initially had one. Despite the freeze, the number of full-time employees at MAC grew 4 percent from just prior to September 11, 2001 to a year later. The median increase for airports responding to our phone survey was 1 percent. MAC attributes its staff increase to the 10 additional police officers and 11 community service officers hired to meet the new federal mandates for airport security.[8]

MAC did not lay off any employees but neither did 73 percent of the airports that we contacted. Six airports reported layoffs, but only one laid off more than 4 percent of its workforce. Officials at Logan International Airport in Boston reported layoffs of more than 10 percent.

Unlike MAC, which froze non-union salaries for six months, most airports did not implement a salary freeze.

Unlike MAC, about two-thirds of the airports in our sample did not institute a salary freeze following September 11, 2001. Of the seven airports that reported a salary freeze, four applied it to all employees, while two only applied it to some senior managers. One airport applied the freeze only to non-unionized employees, just as MAC did. Each of the seven airports imposed the salary freeze for a longer period than MAC's six-month freeze.

8 MAC may be able to recover the salary costs related to increased airport security requirements from the federal Transportation Security Administration.

Although MAC was criticized for not reducing its rates and charges to airlines following September 11, 2001, only 19 percent of the airports in our survey reported that they had reduced rates such as landing fees and terminal rents. Special circumstances seem to explain at least three of the four cases in which reductions occurred. One airport financed the reduction using monies from a large unreserved cash fund. Another financed rate cuts for 2002 using over-recovered rates and charges from 2001. A third airport reported that it would finance the cuts using budget reductions but, if the reductions are not sufficient, it will bill the airlines at the end of the year to recover any costs that the new rates do not recover.

Northwest's Request to Park Airplanes

Northwest Airlines asked MAC for help in responding to the 9/11 crisis.

Northwest Airlines requested free parking at MSP for a number of aircraft following the events of September 11, 2001.

One of the concerns raised by Northwest Airlines following September 11, 2001 was about MAC's failure to respond in a timely and positive way to the company's need to temporarily park some aircraft. Specifically, on October 1, Northwest Airlines (NWA) asked MAC management if it could park 30 to 45 aircraft at Minneapolis-St. Paul International Airport free for a period of up to about nine months. NWA did not expect to fly all of its planes once air travel resumed after the suspension of flights on September 11 and needed temporary space to store them before selling them or permanently storing them elsewhere.

MAC management verbally rejected Northwest's request on October 9 given the need to park charter aircraft in the only area available for parking that many planes.[9] Two days later, Northwest Airlines officials again asked MAC management what MAC could do to help the airline with its parking needs. In particular, Northwest officials asked if MAC would provide free parking for about 15 aircraft that could be activated on a daily basis if needed. MAC managers did not meet with Northwest Airlines officials until October 29 to discuss a low-cost alternative plan. Northwest continued to request free parking. On November 13, 2001, MAC management sent Northwest Airlines a letter offering a 700 by 150 foot parking area at $1,750 per month, which MAC management said would cost substantially less than the $60,000 per month that would normally be charged to airlines for similar space.[10] By that time, NWA's needs had already been addressed at the Detroit airport and elsewhere across the country. NWA would have preferred to park some of its planes at MSP where mechanics would be readily available to work on them if needed. NWA parked about 10 to 12 planes

9 Parking was available at the ramp adjacent to the site where the new Federal Express building was to be built at MSP.

10 Northwest Airlines made its request to MAC management in an October 1, 2001 letter. MAC management says the request was mentioned briefly at an October 3 meeting of the commission's finance committee, although no mention of the request is included in meeting minutes. Minutes indicate that the request was mentioned at a November 7, 2001 meeting of the commission's management and operations committee.

for free on a taxiway at the Detroit airport for a period of two to six weeks before selling them or moving them to more permanent storage.

In our opinion:

- **MAC management should have placed a higher priority on accommodating Northwest Airlines' needs to park aircraft following the events of September 11, 2001.**

MAC's response to Northwest Airlines' request for free aircraft parking should have been more timely.

Although the period following September 11 was clearly a difficult period for the airlines and airport operators, MAC should have responded more quickly to NWA's request. MAC's executive director acknowledged to us that the agency failed to respond in a timely manner.

It should be understood, however, that MAC staff may have had legitimate concerns about offering free parking. MAC management was concerned that providing free parking would set a precedent and would cause other airport users—such as other airlines, taxicabs, and concession operators—to expect rate or rent reductions. In addition, Minneapolis-St. Paul International Airport has limited space compared with other airports. As a result, the airport has had a tradition of making users pay for the use of space. This philosophy has worked to the benefit of Northwest Airlines in some instances. Charter planes, unlike NWA planes, are typically parked at the airport several days each week and pay parking fees for the use of the space immediately adjacent to the space NWA could have used at MSP. From the perspective of MAC staff, NWA was essentially asking for an exception to the rules that MAC staff believe NWA has supported in the past.

The situation at the Detroit airport was also somewhat unique. Aircraft are generally not parked on a taxiway for any extended period of time because taxiways are used on a regular basis by planes moving to and from runways. The taxiway in Detroit was, however, infrequently used. Parking on this taxiway only affected NWA's operations by blocking access to its own hangar at one end. The effect on operations was limited since access to the hangar was still available from the other end.

MAC staff say that a parking arrangement similar to that at Detroit was not available at MSP. Nevertheless, given the unprecedented challenges faced by the airlines after September 11, MAC should have responded with more urgency and should perhaps have been willing to make a brief exception to usual practices.

Proposed 2003 Budget

As shown in Table 2.6, in September 2002, the executive director of the Metropolitan Airports Commission proposed a 12 percent increase in MAC's operating budget (excluding depreciation) for 2003. Because the airline industry had significant financial losses in 2001 and their financial troubles were continuing in 2002, the airlines serving the Minneapolis-St. Paul International Airport requested that MAC keep its 2003 operating budget (excluding depreciation) at the same level as it was in 2002.[11]

11 The airlines' request came after MAC staff presented their initial budget proposal to the commission in October 2002.

Despite the airline industry's continuing financial problems, MAC staff proposed a 12 percent increase in operating expenses for 2003.

Table 2.6: Budgeted Operating Expenses (in $1,000s) for the Metropolitan Airports Commission, 2002-2003

Type	2002 Budget	2003 Budget Initially Proposed by MAC Staff	Proposed Percentage Change: 2002-03	2003 Budget Approved by the Commission	Percentage Change: 2002-03
Personnel	$ 41,581	$ 45,512	9%	$ 42,568	2%
Administrative	1,172	1,034	-12	1,014	-13
Professional Services	3,954	4,068	3	3,680	-7
Utilities	10,755	11,372	6	11,274	5
Operating Services	12,925	14,203	10	13,364	3
Maintenance	14,343	17,397	21	16,716	17
Other	623	1,598	157	1,585	154
Subtotal: Operating Expenses Excluding Depreciation	$ 85,353	$ 95,184	12%	$ 90,201	6%
Depreciation	$ 76,518	$ 82,956	8%	$ 80,805	6%
Total Operating Expenses	$161,871	$178,140	10%	$171,006	6%

SOURCE: Metropolitan Airports Commission.

The commission reduced the staff-proposed increase of 12 percent to less than 6 percent when it adopted a budget in mid-December 2002. The 6 percent increase includes no increase in the number of MAC staff and no salary increase for MAC's non-unionized employees who comprise slightly more than half of the staff. The commission is also using $3.3 million from its 2002 operating income to keep the estimated amount of fees and charges to be paid by the airlines from increasing between 2002 and 2003.[12]

Despite MAC's relatively low costs compared with those at other airports, there have been some general concerns about MAC's budgeting process, as well as specific concerns about the size of the proposed increase for 2003. Concerns have been raised by the airlines about the need for MAC staff to involve the airlines in a more cooperative way in developing the proposed budget to be presented to the commission. In past years, although less so this year, the airlines have complained about the limited length of time available to review and comment on the proposed budget prior to its adoption by the commission. In addition, there is the question of whether MAC's budget should be subject to legislative review. These issues are dealt with in Chapter 5.

Like the airlines serving the Minneapolis-St. Paul International Airport:

- **We are concerned that the staff for the Metropolitan Airports Commission proposed a significant increase in the agency's 2003 operating expenses during a time that the airlines are incurring significant losses.**

12 MAC's operating income is calculated by subtracting its operating expenses, including depreciation, from its operating revenues.

Although the proposed 12 percent increase was ultimately reduced by the commission, we think that the current process needs improvement by MAC and additional oversight by the Legislature. We are somewhat sympathetic to MAC's predicament of having expanded the size of its facilities at MSP while now being asked to hold the line on expenses. But we think that MAC staff have not provided adequate information to show how the expanded facilities contribute to increased expenses.

The staff's budget request was not adequately justified and was reduced by the commission.

More generally, we think that the format of the documents outlining the proposed budget needs some improvement. In particular, it is difficult to determine the exact basis for some proposed spending increases, as well as the rationale. Some explanation of the increase in each major spending category is provided, but it can be difficult for the commission and interested parties to determine how much of the increase is due to various factors.

For example, in the initially proposed budget for 2003, MAC staff proposed a $3.1 million increase in maintenance spending.[13] This was a 21 percent increase from 2002 and represented close to one-third of the overall proposed increase. The proposed budget document explained that repairs and supplies by trades workers were increasing $0.3 million due to the reinstatement of repairs deferred from 2002 and the growth in terminal space with the expansion of Concourse C and the addition of Concourses A and B. The document also mentioned that many of the increases were directly related to new government requirements, such as security, and the expiration of warranties. But the document failed to provide details on exactly how much of the increase is due to various factors. In particular, it did not provide information on the amount of the increase that is due to security requirements or to the growth of facilities. In addition, it failed to explain why the growth of facilities is having an almost immediate impact on repair work. New facilities would appear less likely to require repairs than older parts of the airport.

We recommend that:

RECOMMENDATION

In future proposed budgets, the Metropolitan Airports Commission staff should provide more detailed explanations of the source of, and rationale for, increases in its operating expenses.

CAPITAL BUDGET

In this section, we examine how MAC changed its capital budget in response to the events of September 11, 2001. We also review how MAC has managed the costs of the 2010 plan. First, however, it is important to put MAC's capital spending in perspective. As Table 2.7 shows, MAC's capital spending per

13 Maintenance spending includes the materials, equipment, and supplies used to maintain and repair terminal and other buildings and to remove snow from the runways, roads, and parking facilities. Contracts for cleaning services are also included. MAC's personnel costs for maintenance are not included in this spending category.

Table 2.7: Airport Capital Expenditures, Debt, and Debt Service Coverage, MSP Compared With Other Airports

Type of Charge	MSP	Average for Other Airports	Percentage Difference From Average	Median for Other Airports	Percentage Difference From Median	MSP's Rank
Capital Expenditures per Enplanement (2000)	$27.27	$9.84	177%	$7.44	267%	3rd highest of 31 large hub airports
Debt per Enplanement (Projections from Moody's prior to September 11, 2001)	68.86	N/A	N/A	51.33	34	N/A
Debt Service Coverage Ratios (Projections from Moody's prior to September 11, 2001)	1.51	N/A	N/A	1.98	-24	N/A

SOURCES: Office of the Legislative Auditor's analysis of data from the Federal Aviation Administration; and Metropolitan Airports Commission, *2002 Operating Budget*, 286.

Due to the implementation of the 2010 plan, MAC's capital spending and debt are well above industry averages.

enplaned passenger in 2000 was significantly higher than the average for large hub airports. This reflects the fact that MAC has been in the process of implementing the 2010 plan for expanding the Minneapolis-St. Paul International Airport.

As a result of the airport's expansion, MAC's outstanding bonded indebtedness has grown from just $0.3 billion at the end of 1997 to $1.6 billion at the end of 2001. According to data from Moody's—a leading bond rating firm—MAC's debt per enplaned passenger was about 34 percent higher than that for all large airports. MAC's debt coverage ratio—which is an indication of an airport's ability to pay debt—was about one-fourth lower than the industry average in 2001 just prior to the events of September 11, 2001.

Despite the large increase in debt and the recent distress in the airline industry, MAC's bonds have retained fairly high ratings. As of mid-September 2002, both Fitch and Standard & Poor's rated MAC's airport revenue bonds AA-. Only two other airports received a higher rating by Fitch, and none received a higher rating from Standard & Poor's.

MAC Response to September 11

Overall:

- **The airlines serving the Minneapolis-St. Paul International Airport have been pleased with how the Metropolitan Airports Commission reduced its capital budget for 2002 following the events of September 11, 2001.**

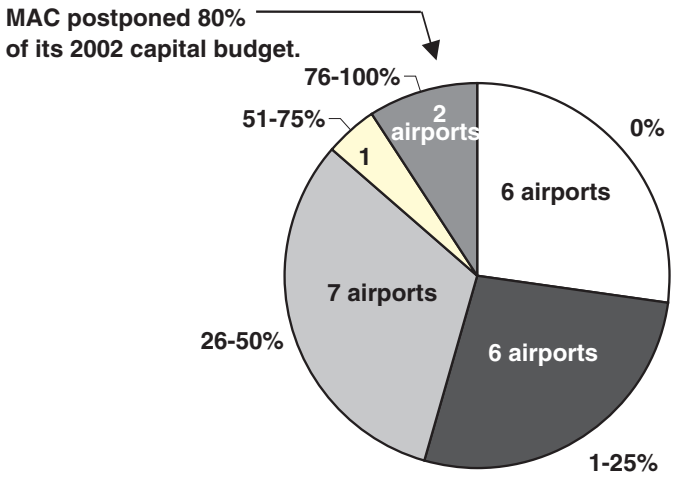
MAC cut $118 million from projects remaining in its 2001 capital budget. It also reduced its 2002 capital budget by 80 percent. The 2002 budget was cut from the planned $371 million to only $76 million. MAC's intent was to defer implementation of the projects being cut until the commission had a better sense of how the events of September 11, 2001 would affect the airline industry.

As Figure 2.4 indicates:

- **Most airports we contacted did not reduce their capital budgets as much as the Metropolitan Airports Commission did following September 11, 2001.**

Following September 11, MAC deferred more capital spending than did most other airports.

Figure 2.4: Percentage Reductions in Capital Budgets at Various U.S. Airports Following September 11, 2001



SOURCE: Office of the Legislative Auditor's phone survey of airports, July-September 2002.

Three-fourths of the 22 airports we contacted reduced their capital budgets following September 11. Like MAC, most of the airports postponed the implementation of capital projects for a year or more, but a few also canceled some projects. These airports reported capital budget reductions ranging from 1 to 100 percent, but only one airport (Charlotte, North Carolina) reduced its capital budget by a larger percentage than did MAC. Only 3 of the 22 airports reduced their capital budgets by more than 50 percent. The median percentage reduction for the airports we contacted was 17 percent.

Management of 2010 Plan Costs

While airlines have agreed with the changes MAC made to its capital budget following September 11, 2001, some have been critical of how MAC has handled certain capital projects. In particular, Northwest Airlines officials have criticized the cost overrun on the light rail transit project at the Minneapolis-St. Paul

International Airport and the costs of constructing the new Humphrey Terminal at MSP. The costs of these two projects are, however, only expected to be about 7 percent of the total costs of the 2010 plan for expanding and improving the Minneapolis-St. Paul International Airport. Before examining the criticisms about these two projects, we will consider how the current cost estimates for the entire plan differ from initial estimates.

The estimated costs of implementing the 2010 expansion plan for MSP have grown by 3 percent since 1998.

The 2010 plan, which was approved by the 1996 Legislature, was estimated in 1998 to cost $2.186 billion. Given the inflation expected to occur between 1998 and the years that various portions of the plan were expected to begin, the original cost estimate can be adjusted to approximately $2.403 billion. Table 2.8 shows that construction of a new runway accounted for about 25 percent of the total costs of the 2010 plan. Other major portions of the plan include noise mitigation (20 percent), various rehabilitation and repair activities (11 percent), extension of the Green Concourse (10 percent), and expansion of the public parking and auto rental facilities (8 percent).

According to MAC staff, the estimated costs of implementing the 2010 plan have grown to $2.469 billion, as of early September 2002. This figure represents the best estimate of the costs of the plan but is not final because projects are at various stages of development. The estimate reflects the cost of work that was already completed, current project budgets for work that was bid out but was not yet completed, and current cost estimates on projects for which construction bids have not yet been received.

The current estimate puts the costs of the 2010 plan within 3 percent of the original estimate, including inflation. MAC staff believe that the costs of the 2010 plan are coming in reasonably close to the original estimate, considering the difficulty of estimating costs. In addition, they point out that costs to be paid by the airlines serving MSP are currently about $38 million below the original estimate. In contrast, costs to be paid from parking and other concessions revenues are running about $104 million above the original estimate.

Table 2.8 shows that the largest cost overruns have occurred in four areas. First, the expansion of MSP's public parking and auto rental facilities cost $42 million—or 21 percent—more than the original estimate of $196 million. MAC staff say that a number of factors contributed to the increase in costs. Unforeseen conditions such as contaminated soils and the need to relocate more utilities than expected raised costs. In addition, the scope of the work was expanded. The transit center project became much more than a simple relocation of the bus stop, and two additional cars were added to the automated people mover built to serve the parking ramps.

Second, the cost of extending Concourse C and building new gate capacity at the Lindbergh Terminal increased by $21 million—or 9 percent—from the original estimate of $243 million. The purpose of this project was to build new gate capacity for Northwest Airlines and, in particular, for its regional air carrier partners that fly propeller airplanes and small jets. MAC staff attribute most of the increase to the bidding environment. They say this was a complicated project that was to be built on an accelerated schedule. Bids for the project were higher than estimated, but Northwest Airlines agreed that the project should go forward and the bids should be awarded. Additions to the project scope also contributed to

Table 2.8: Cost Changes for the 2010 Long Term Comprehensive Plan, As of September 2002

Program Area	Original Cost Estimate[a]	Share of Original Estimate	Current Cost Estimate	Percentage Change in Costs
Construction of New Runway	$ 611,943,000	25%	$ 582,021,802	-5%
Noise Mitigation	477,469,000	20	448,529,181	-6
Various Rehabilitation and Repair Projects[b]	253,985,000	11	268,240,869	6
Concourse C Extension[c]	242,677,000	10	263,670,762	9
Public Parking/Auto Rental Expansion	196,492,000	8	238,420,191	21
Reliever Airports	160,838,000	7	166,270,753	3
Miscellaneous Landside	145,255,000	6	154,093,237	6
Humphrey Terminal Development	81,357,000	3	96,137,281	18
Light Rail Transit	76,557,000	3	86,853,331	13
Runway Deicing/ Holding Pads	61,156,000	3	62,789,079	3
Miscellaneous	95,630,000	4	101,905,992	7
Totals	$2,403,359,000	100%	$2,468,932,478	3%

[a]The original estimates were in 1998 dollars. These estimates were adjusted for inflation between 1998 and the start dates for individual projects.

[b]Includes airfield, runway, landside, and terminal projects.

[c]Includes the expansion of Concourse C (formerly the Green Concourse) and the construction of Concourses A and B.

SOURCE: Office of the Legislative Auditor's analysis of data received from the Metropolitan Airports Commission.

Large cost overruns have occurred on several MAC construction projects.

part of the cost increase. The original estimate was not based on fully bridged gates for the regional jets.[14] MAC also added space to the Northwest Airlines World Club facilities at the airline's request.

Third, the cost of building a new Humphrey Terminal to serve Sun Country Airlines and the charter airlines increased by close to $15 million—or 18 percent—over the original estimate of $81 million. The cost increase was due in part to increases in the project scope. The commission added an eighth gate so that future growth in charter and other airlines could be accommodated. When Sun Country began providing scheduled air service, the commission added two more gates to ensure that the terminal's capacity was adequate to serve the charter airlines during the peak charter season. In-pavement fueling capability was also added to the project.

Finally, the MAC portion of the costs for the light rail stations and lines at MSP increased $10 million—or about 13 percent—over the original estimate of $77 million. This occurred because bids for the part of the light rail project that MAC was overseeing came in well over earlier estimates. Rather than redesign and rebid the project, the commission—at the recommendation of the chairman of the

14 Fully enclosed bridges allow passengers to board an airplane from the terminal without being exposed to outside weather conditions.

Metropolitan Council, the commissioner of the Department of Transportation, and the executive director of MAC—awarded the contract to the low bidder and increased the maximum MAC contribution from $70 million to $87 million.[15] The airlines' share of the costs increased from about $6.2 million to $12.5 million. MAC staff offset the impact of the light rail cost overrun on Northwest Airlines by reducing NWA's costs on the Concourse C expansion. MAC did this by using revenues from passenger facility charges to reduce the costs billed to the airline for that project.

A number of construction projects have experienced cost overruns, but MAC staff believe the cost of the 2010 plan will be within 3 percent of the original estimate.

MAC staff believe that further cost increases for the 2010 plan are unlikely.

Despite the cost overruns on a number of the large projects that are underway or have been completed:

- **MAC staff are confident that the overall costs of the 2010 plan will remain within 3 percent of the original estimate.**

According to MAC staff, about two-thirds of the plan has been completed or is in the process of being completed. The remaining one-third of the plan consists of projects that MAC staff believe are less risky than those that have already been bid or completed. The two major remaining components of the 2010 plan are the new runway and the extension of the noise mitigation program to areas with noise levels of 60-64 DNL. Some of the work on the new runway has already been done, including property acquisition, underground utilities, roadways, bridges, and tunnels. Most of the rest of the work consists of paving and other above-ground elements for which there is less risk of a cost overrun. One large property must still be acquired, but MAC staff think that it will likely cost less than budgeted due to current market conditions.[16]

MAC is nearing completion of the noise mitigation program for homes within the 65 DNL noise contour. Although MAC's sound insulation program has experienced cost increases in the past, staff believe that this is unlikely to be a major problem with the extension of the program to the 60-64 DNL area. MAC has better information about the number and characteristics of the homes that will be insulated and the types of heating systems in the remaining homes. As a result, agency staff believe that the risk of cost overruns is low.

---

15 The original cost estimate—as well as the maximum contribution that MAC approved—was $70 million. As a result, most observers would say the cost overrun on the MAC light rail project was $17 million, or 24 percent, of the original estimate. We are, however, using the $70 million from the 2010 plan, which was calculated in 1998 dollars, and adjusting it for the inflation between 1998 and the start of the project. As a result, the "original" estimate becomes about $77 million.

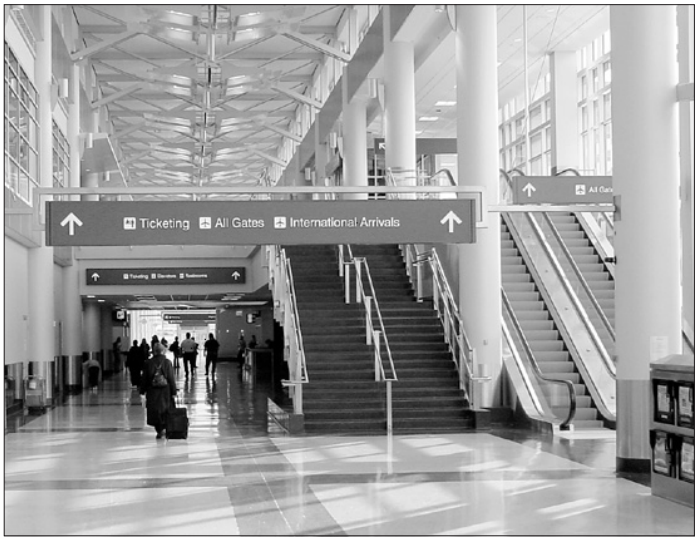
16 The cost of constructing the new runway and associated work is projected to exceed the original estimate. But, the net cost of the project is currently expected to be about $30 million less than the original estimate of $612 million due to $83 million in revenues from operating properties acquired by MAC. The revenues from these properties, which had to be acquired in order to operate the new runway, were not included in the original cost estimate for the project.

There is some risk of cost overruns with the remaining parts of the light rail transit project since station construction and about half of the station excavation are not completed. MAC staff say, however, the risk of cost overruns on these portions of the project are considerably less than on the tunnel excavation and the portion of the station excavation already completed.

While MAC staff are confident that the actual cost of the 2010 plan will ultimately be within about 3 percent of the original estimate, it is difficult for us to reach a firm conclusion since there is at least $700 to $800 million in work remaining to be done. In addition, it is difficult to come to a firm conclusion about MAC's efforts to control capital costs on those projects it has completed. Sometimes, there are good reasons why project costs exceed estimates. Bids exceed estimates at times, and awarding the contract may be appropriate if MAC does not believe that the project can or should be scaled back or that the bidding environment would improve. In addition, unforeseen conditions can result in additional costs. Changes in project scope may be justified if market conditions have changed or original planning failed to consider important factors.

The new Humphrey Terminal provides capacity for future expansion but is currently underutilized and requires an operating subsidy.

The construction of the new Humphrey Terminal has been criticized because it is now underutilized and has an estimated revenue shortfall of $2.5 million for 2002.[17] MAC officials, however, defend the project as necessary in light of the overcrowding at the old Humphrey Terminal's gates and its undersized ticketing and bag claim areas. Sun Country's decision to provide scheduled air service, as well as charter service, affected the size of the project although the completion of two of the ten gates was deferred following the airline's decision to end scheduled service and file for bankruptcy protection.



The new Humphrey Terminal is currently underutilized but provides the airport with facilities to accommodate new air service in the future.

When MAC made the decision to build a new Humphrey Terminal, the economy was growing and air traffic was increasing at MSP. MAC could not have foreseen the decline in travel that would occur with the economic recession and the events of September 11, 2001. But it could be argued that MAC should have been somewhat more skeptical that Sun Country would succeed with its business plan to provide scheduled service and compete successfully over the long run. Sun Country's management had limited airline industry experience and found it very difficult to compete successfully by

17 Faced with the much higher costs of a new Humphrey Terminal and a reduction in Sun Country air service, MAC is not able to recoup the costs of the terminal from current users. During 2002, MAC used an estimated $2.5 million in parking and other concession revenues from the Lindbergh Terminal to subsidize the operation of the new Humphrey Terminal.

providing service of one flight per day to a large number of cities. The airline incurred significant losses even before the events of September 11 compounded its problems and caused it to file for bankruptcy protection.[18]

Even though the new terminal is greatly underutilized at the present time, MAC officials point out that the airport is well-positioned for the future in the event that airlines wish to provide additional service at MSP. The airport will have gates available to attract new entrants and help keep airfares competitive.

It is unlikely that MAC will be expanding gate capacity in the foreseeable future for new entrants at MSP. But this may happen at some point in the future as the aviation industry and economy recover and air travel once again grows. At that point, MAC officials should more carefully weigh the risks to MAC, as well as the costs and benefits to the traveling public, involved in expanding the number of gates at MSP.

NON-AIRLINE OPERATING REVENUES

Background

Concessions represent a substantial portion of MAC's operating revenues.

In 2001, the Metropolitan Airports Commission collected $73 million in airline rates and charges and $97 million in operating revenue from non-airline sources. The largest source of non-airline operating revenues is concessions, including parking, rental cars, food and beverage sales, and merchandise sales. Concession revenues were close to $70 million in 2001. Concession revenues can help pay airport operating costs, and any amount not needed for that purpose is available for making bond payments or directly paying for capital projects.

MAC contracts out most of the concessions at MSP. MAC hires a private company (APCOA) to manage its parking facilities. In 2001, it paid about $5.9 million for parking management services and received gross parking revenues of $39.3 million. MAC receives bids from private rental car companies that wish to do business at MSP. Revenue in 2001 from these companies was $13.7 million.

MAC also contracts with private companies to operate the retail, food, and beverage concessions at MSP. MAC's revenues from merchandise sales were $4.6 million in 2001, while revenues from food and beverage sales were $4.1 million. HMS Host, or its corporate predecessors, has operated concessions at MSP since at least the 1970s. Currently, HMS Host provides concessions in the main Lindbergh Terminal building and on Concourses D, E, and F. It also ran the concessions in the old Humphrey Terminal. Anton Airfood operates the food and beverage concessions in the new Humphrey Terminal and on Concourses A, B, and C in the Lindbergh Terminal; and PCBR operates the retail and merchandise concessions in those areas. MAC also contracts with a variety of individual concessionaires, such as hair and beauty shops and shoeshine stands. Because of the terms of the lease for Concourse G, Northwest Airlines is responsible for the operation of concessions in that part of the Lindbergh Terminal and receives

18 The company has since been sold and is still providing significant levels of charter service at the new Humphrey Terminal, but its scheduled service has been greatly reduced.

85 percent of the rent revenues from that part of the terminal. MAC receives 15 percent of the rent revenues received by Northwest from concessions on Concourse G. Northwest Airlines also contracts with HMS Host to provide a significant portion of the concessions on that concourse.

For food, beverage, and retail concessions, MAC receives a minimum negotiated rent or a specified percentage of gross sales, whichever is greater. Generally, MAC has received more than the minimum rent from HMS Host, so its revenues from Host-operated concessions depend on the amount of sales, as well as the percentage of gross sales that concessionaires are required to pay to MAC. The Anton and PCBR contracts tend to have lower rent percentages than the HMS Host contract but have high minimum rents. As a result, in 2001, the rents paid by Anton and PCBR were based on their minimum rents. On Concourse G, MAC gets 15 percent of the concession revenues received by Northwest Airlines.

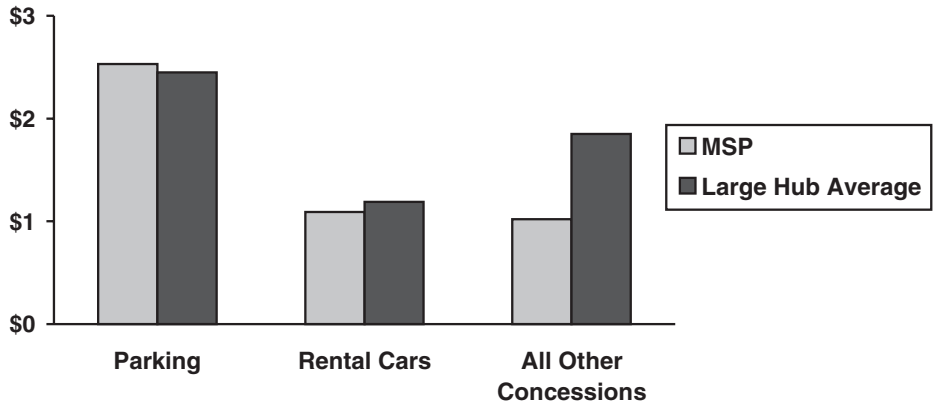
Revenue Comparisons

MAC's concession revenue from sources other than parking and rental cars is well below the average for large airports.

Figure 2.5 shows how MAC revenues from various concessions compare with revenues at other large hub airports. Parking revenues per enplaned passenger were about 3 percent higher at MSP than the average for large hub airports in 2000. In addition, rental car revenue was about 8 percent below the large hub average. However, even including the concessions revenue received by Northwest Airlines:

- **Revenue per enplaned passenger from MSP concessions other than parking and rental cars was 45 percent below the average for large hub airports in 2000.**

Figure 2.5: Concessions Revenue per Enplanement, MSP Compared With Other Large Hub Airports, FY 2000



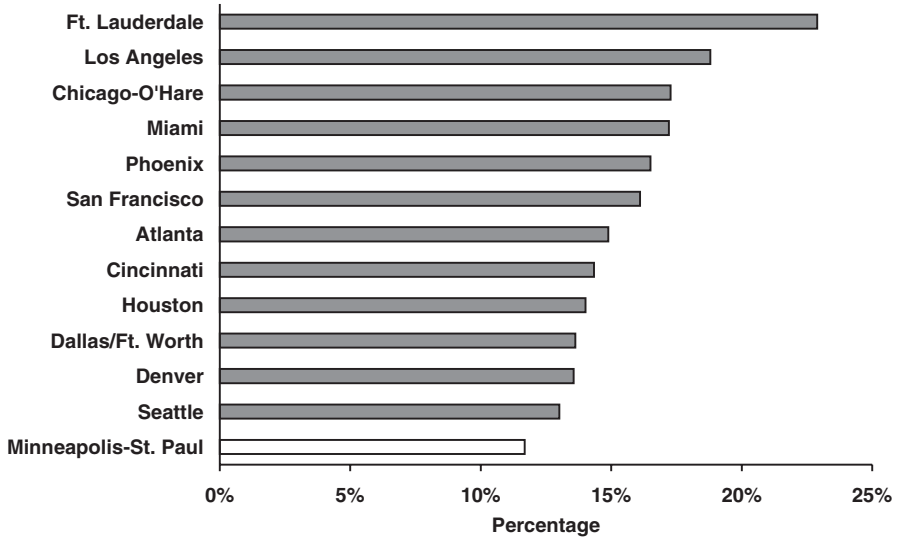
SOURCE: Office of the Legislative Auditor's analysis of data from the Federal Aviation Administration.

To understand MSP's lower than average concession revenues, we focused on revenues from food, beverage, and retail concessions—which are a major part of the revenues MAC receives from concessions other than parking and rental cars. We asked a MAC official whether below average rents charged to concessionaires were responsible for MAC's below average revenues. The MAC official initially assured us that rents paid by MAC's concessionaires—as a percentage of gross sales—are consistent with general practices at other airports. But, when we asked for evidence to support his assertion, he asked a MAC consultant to provide data comparing MAC sales and rents with those at a sample of other large hub airports. Figure 2.6 provides a summary of the rent data provided by the consultant. The data show that:

- **The rent that the Metropolitan Airports Commission receives from food, beverage, and retail concessionaires is low in comparison with rents at other large hub airports.**

MAC's rental rates for retail, food, and beverage concessionaires appear to be among the lowest in the industry.

Figure 2.6: Airport Rent Revenue as a Percentage of Gross Sales from Retail, Food, and Beverage Concessions, 2001



SOURCE: Office of the Legislative Auditor's analysis of data from the Metropolitan Airports Commission and the Center for Airport Management, LLC.

For 2001, MAC received rent from food, beverage, and retail concessionaires of 11.7 percent of gross sales.[19] This figure was more than one-fourth less than the average of 15.7 percent received at 13 large hub airports including MSP. MAC's rent percentage was lower than the percentage at any of the other airports used for comparison purposes. The rent percentage at the other airports in the consultant's sample ranged from 13 to 23 percent.[20] In addition, MAC's rent was lower than

19 This figure does not include revenues and sales on Concourse G.

20 The average rent received from food and beverage concessions was generally smaller than that received from retail concessions. MAC received an average rent of 10.3 percent from food and beverage concessions compared with a large hub average of 13.8 percent. For retail concessions, MAC received an average rent of 13.3 percent compared with a 18.4 percent average for other airports.

that received by Northwest Airlines from concessions on Concourse G. The airline's concessions revenue was 15.8 percent of gross sales during 2001.[21]

MAC's rents *per passenger* and sales *per passenger* are difficult to compare with those at other large airports. Because Northwest Airlines controls the concessions on Concourse G, it is necessary to allocate a portion of the passengers at MSP to concession sales on Concourse G and the remaining passengers to concessions under MAC's control. About 29 percent of departing passengers used Concourse G in 2001, while 71 percent departed from other concourses. It would be inaccurate, however, to assume that the passengers who departed on Concourse G only purchased concessions from the stores on Concourse G. In fact, it is likely that many of these passengers, who generally pass through MAC's concessions area first, purchased concessions from MAC-controlled concession operations. It is less likely—though possible—that passengers departing from concourses other than Concourse G purchased concessions on Concourse G.[22] As a result, any comparison of sales or rents per passenger that splits the passengers at MSP based on the concourse on which they departed would probably understate the number of passengers that frequent stores under MAC's control—and thus overstate MAC's sales or rents per passenger.

Concession sales per passenger at MSP appear to be slightly above the industry average.

We compared MAC's sales per passenger with other large airports using only those passengers at MSP who departed at concourses other than Concourse G. These comparisons suggest that MAC's sales per passenger were about 14 percent above the average for the 13 large airports including MSP. This comparison, however, probably overstates the extent to which sales per passenger at MSP exceed the average, for the reasons outlined above. If all concourses and passengers at MSP are included in the comparison, we found that sales per passenger at MSP were only about 4 percent above the average in 2001 and ranked sixth highest of the 13 airports.

MAC's rent revenues from concessions are below the industry average, while sales appear to be slightly above average.

In 2001, MAC's rents per passenger were below the average for the group of large airports included in the consultant's comparison. But, the extent to which rents per passenger are below average depends on how passengers are allocated in the comparison. A simple comparison suggests that MAC's rents per passenger were

21 MAC's current contract with HMS Host requires Host to pay rent equal to 7.5 percent of sales of food and non-alcoholic beverages and 12 percent of sales of alcohol at "branded" stores, while Northwest Airlines' current contract with Host entitles them to 12 percent of "branded" food and beverage sales and 20 percent of alcohol sales on Concourse G. (Branded stores are well-known stores that sell brand-name products, such as Burger King.) In addition, MAC currently receives rent equal to 10.5 percent of sales of non-branded food and beverages and 15 percent of sales of alcohol at non-branded facilities. In contrast, Northwest receives 15 percent of the sales of non-branded food and beverages. On gift and newsstand sales, MAC receives 16 percent, while Northwest receives 18 percent. Northwest Airlines has also negotiated increases in their rent percentages for 2003.

22 These passengers would have to go more out of their way to make purchases on Concourse G.

about 15 percent below average and ranked eighth highest of 13 airports in 2001. If all concourses and passengers at MSP are included, however, MSP's rents per passenger were 18 percent below average and ranked ninth highest of 13 airports. Regardless of the method used, MAC's rents per passenger have been below average when compared with other large airports.

MAC staff caution that accurate comparisons of rents can be difficult to make across airports. The percentage of sales paid as rent is likely to be higher for long-term contracts.[23] In addition, a lessee would probably pay a lower rent if the lessee had to contribute substantial funds toward the remodeling or building of its retail facilities. In the latter half of the 1990s, substantial renovation of the concessions occurred at the Minneapolis-St. Paul International Airport. MAC paid $13 million toward the remodeling of the Lindbergh Terminal. HMS Host only paid $2 million, and a few sub-lessees to HMS Host paid to finish their store interiors.[24] In contrast, Anton Airfood and PCBR had to contribute more toward the building of their retail facilities. MAC gave Anton and PCBR $100 per square foot for construction costs but required them to spend at least another $200 per square foot.

MAC needs to increase its rental rates for certain concessions.

Despite their much shorter contracts and higher construction cost contributions, Anton Airfood and PCBR paid higher rents as a percentage of their 2001 sales than did HMS Host. Anton's rent as a percentage of gross sales was 15.1 percent and PCBR's rent was 12.8 percent of sales.[25] In contrast, Host's rent was only 11.0 percent of its gross sales. Clearly, the HMS Host contract is a key source of MAC's lower than average rents. We are particularly concerned that MAC has had a long-term relationship with HMS Host, and its corporate predecessors, with no competitive bidding of the contract for more than 20 years.[26] The only time that the food and beverage portion of Host's contract was competitively bid was in the late 1970s. It appears that MAC has never competitively bid the retail, news, and gift portions of Host's contract. We recommend that:

RECOMMENDATION

When contracts for retail, food, and beverage concessions expire at the end of 2003, the Metropolitan Airports Commission should consider increasing the percentage of gross sales paid as rent to a level more comparable with other large hub airports.

---

23 Other factors affecting rents might include the demographic characteristics of airport passengers, the age of concession facilities, and the requirements placed by airports on participation by businesses owned by disadvantaged individuals. MAC staff also believe that newer contracts have generally paid more rent than older contracts.

24 According to MAC officials, HMS Host should not have even incurred the $2 million cost, but it was Host's error.

25 The contracts for Anton Airfood and PCBR require them to pay rent equal to the greater of 10 percent of gross sales or $55 per square foot per year. Although their percentage rents are not significantly different than those paid by HMS Host, their minimum rents per square foot are higher and are responsible for their higher overall rent payments in 2001.

26 The current contract with HMS Host dates back to 1988. MAC staff negotiated this contract with HMS Host and did not use a competitive process to solicit bids from other concessionaires.

While MAC has won numerous national awards for its concessions program, MAC should be able to receive more revenue from concessions than it is currently receiving. Additional revenues could help relieve some of the burden on the airlines from MAC's large construction program.

Until recently, MAC staff told us they were currently considering a 14-month extension to the concessionaire contracts that expire at the end of 2003. In October 2002, HMS Host officials offered a 5-year extension of its contract with a significant increase in rent. The HMS Host offer, however, contains a number of provisions that MAC staff believe are not in line with today's competitive market.

While MAC has won numerous awards for its concessions program, it needs to improve its financial returns from the program.

Discussions of future options for the concessions program should focus on the net financial return to the airport.

In part due to our finding that MAC's rents are not competitive in the current market, MAC staff say they are no longer considering an extension to the HMS Host contract.[27] MAC staff will likely be recommending to the commission that the concessions currently controlled by HMS Host be competitively bid prior to the contract's expiration at the end of 2003. MAC staff would likely recommend future options for consideration by the commission. Options could include: 1) increasing the number of master concessionaire firms like HMS Host that are responsible for the concessions currently operated by HMS Host; 2) eliminating master concessionaires and having MAC staff deal directly with restaurants and retail firms at the airport; or 3) retaining a single master concessionaire responsible for the concessions currently under HMS Host's control.

In any event, we think the discussion about various options should focus on increasing MAC's *net return* from concessions operated at the airport. If greater numbers of MAC staff are used to manage and contract directly with restaurants and retail firms, then those staffing costs should be factored into calculations of MAC's net return. If MAC considers options that require it to make capital expenditures for new or existing firms, those costs should also be factored into net return calculations.

In considering future options for its concessions program, MAC should also give some consideration to customer prices paid for food, beverages, and retail goods at MSP. But increasing rent percentages paid by concessionaires should not

27 MAC staff say that they are likely to recommend an extension of the contracts with Anton Airfood and PCBR for a period of slightly more than five years. Both companies have paid higher rents than HMS Host despite having much shorter contracts and less desirable locations. These companies also were asked to contribute more toward the construction of concession facilities.

necessarily mean that customer prices rise accordingly. The low rents currently paid by concessionaires at MSP may not be resulting in lower customer prices but instead higher profits for the concessionaires.

Auditing Concessionaires

The Metropolitan Airports Commission entrusts concessionaires to pay MAC in accordance with contract language. Because the rent that food, beverage, and retail concessionaires pay MAC is based on gross sales, it is important for MAC to have independent confirmation that the reported sales figures are accurate. In addition, other contract payments such as reimbursements for utilities are important to monitor. Similarly, MAC needs to confirm the accuracy of the parking revenues reported by the parking management firm with which it contracts.

A MAC internal audit found significant billing problems in the concessions program.

MAC has two internal audit staff responsible for auditing concessionaires at MSP and firms that provide various services at its reliever airports. We think that such internal audits are important ways that MAC can ensure that it is receiving the amounts of revenue to which it is entitled. For example, a recent MAC audit of HMS Host found significant billing problems.[28] MAC never billed HMS Host for most of the utility costs that the company was required to pay. The audit found that Host was responsible for about $530,000 in utility costs during the four-year audit period, 1998-2001. In addition, Host is paying MAC about $1 million for unpaid utilities from 1986 through 1997.

MAC staff have implemented changes to address the billing problems with HMS Host. For example, MAC staff are reviewing existing contracts to ensure that contractors are appropriately billed. In addition, staff from MAC's finance and commercial management departments have established procedures to ensure that billings will be accurate for any new contractors.

These internal audits of contractors, however, are completed at infrequent intervals. Between audits, MAC staff may rely on audited financial statements or independent certifications of sales provided by large contractors. A recent financial audit of MAC by our office pointed out that MAC does not have a formal policy specifying when these forms of greater financial assurances are required.[29] MAC needs to develop such a policy. In addition, MAC may wish to use its internal audit staff to perform spot checks of sales figures of certain concessionaires, or parking receipts and management costs, between audits.

---

28 MAC internal audit staff are currently completing an audit of APCOA, which provides parking management services at MSP. The results of that audit are not yet available.

29 Office of the Legislative Auditor, *Metropolitan Airports Commission, Financial-Related Audit, January 1, 1999, through December 31, 2001* (St. Paul, November 2002), 7-8.

3 Economic Issues

SUMMARY

The Metropolitan Airports Commission is expected to both promote competition and support locally based airlines. In general, MAC has balanced these two objectives reasonably well, although increased competition has been difficult to achieve at the Minneapolis-St. Paul International Airport due to factors beyond MAC's control. MAC's leases with the airlines are providing them with significant relief during the current financial crisis in the airline industry. Beyond that, MAC can best support the airlines by continuing to effectively operate the airport while keeping any operating cost increases to a minimum.

The main role of the Metropolitan Airports Commission is the efficient and effective operation of the Minneapolis-St. Paul International Airport (MSP). But, in operating the airport, the commission and its staff are also expected to perform other functions. For example, MAC is expected to help promote competition at the airport and thus help keep airfares reasonable for the traveling public. In addition, MAC is often expected to maintain a cost structure that enables Northwest Airlines, which has its headquarters and other facilities in Minnesota, to be economically successful and to maintain jobs in the state.

MAC is expected to support Minnesota-based airlines while fostering competition among airlines.

The Metropolitan Airports Commission faces a difficult task in trying to simultaneously achieve these somewhat contradictory goals. Promoting competition at the airport is likely to be detrimental to Northwest Airlines, while providing assistance to Northwest Airlines not available to other airlines may stifle competition at the airport and adversely affect the airfares paid by Minnesotans. In addition, MAC's task is made more difficult by the fact that its impact on competition at MSP and the success of Northwest Airlines is highly dependent on market factors beyond MAC's control. While MAC can provide access to the airport for competing airlines, other factors largely determine the success of those efforts in providing sustained competition. The impact of any efforts by MAC or the state to support airlines based in Minnesota is also limited. Factors such as the demand for air service, fuel costs, and airline management play a large role in determining the success of an airline.

This chapter examines MAC's role in promoting competition at MSP and maintaining airline jobs in Minnesota. In particular, this chapter focuses on the following questions:

- **What steps has the Metropolitan Airports Commission taken to promote competition at Minneapolis-St. Paul International Airport?**

What impact have MAC's efforts had on competition? What other factors affect the level of competition at the airport?

- **How have the state and the Metropolitan Airports Commission helped to maintain airline jobs in Minnesota? How are MAC's efforts restricted by federal regulations? What other factors affect the success of airlines and the retention of jobs in Minnesota?**

AIRPORT COMPETITION

Background

Studies at the national level have generally found that airfares are affected by the degree of competition at airports.[1] Airfares are usually higher at large airports dominated by one of the major airlines than they are at airports that are not dominated by a single airline.[2] Estimates of the "hub premium" paid by travelers at dominated hub airports range from less than 10 percent to more than 50 percent. The estimates of the premium have varied widely depending on the airport, the time period under study, the type of routes examined, and the study methodology.

Minneapolis-St. Paul International Airport is one of the airports that has been frequently identified as having higher airfares. In recent years, Northwest Airlines (NWA) has generally served more than 70 percent of the enplaned passengers at MSP. NWA has been the dominant airline serving MSP since the late 1980s, following the merger of Republic Airlines into NWA in late 1986.

More than 70 percent of the passengers at MSP fly Northwest Airlines.

Airports that serve as "hubs" for major airlines generally receive better service than other airports.

Northwest Airlines and other airlines that dominate other U.S. airports have pointed out that hub airports receive better service than other airports. Clearly, MSP has better air service than most other metropolitan areas, considering the relative size of the Twin Cities metropolitan area. In 2001, MSP had nonstop air service to 112 other cities. Compared with 20 other large airports, only three airports (Pittsburgh, Denver, and Atlanta) serve more airports

1 For example, see U.S. General Accounting Office, *Airline Competition: Higher Fares and Less Competition Continue at Concentrated Airports* (Washington, D.C., July 1993); U.S. Department of Transportation, *Airport Business Practices and Their Impact on Airline Competition* (Washington, D.C., October 1999), 30-32; and Severin Borenstein, "Hubs and High Fares: Dominance and Market Power in the U.S. Airline Industry," *RAND Journal of Economics* 20, no. 3 (Autumn 1989): 344-365.

2 An airport is generally said to be "dominated" by a single airline if that airline provides more than half of the passenger enplanements at the airport.

per capita with nonstop flights.[3] In addition, studies have found that the number of passengers per capita served at MSP ranks high relative to airports in similar metropolitan areas.[4]

Northwest Airlines and other airlines have suggested that the hub premium calculated in various studies is largely due to the better service provided at hubs and the greater proportion of business travelers in hub markets.[5] Business travelers generally have paid higher fares than leisure travelers since business travelers reserve tickets closer to the time of departure, are more likely to purchase tickets with fewer restrictions, and may demand a higher level of service.

But lack of competition at hub airports can lead to higher fares.

The United States Department of Transportation rejects the argument that airports like MSP have higher fares only because of their better service and their greater share of business travelers. The department concludes that a lack of competition has resulted in higher fares. Data indicate that fares are not higher simply because a single air carrier dominates an airport. Rather, airfares are higher at those dominated airports that lack a significant presence of low-fare carriers. Large airports dominated by a single airline may have lower fares if there is a strong enough presence of low-fare carriers. At MSP, the department has estimated that airfares are 55 percent higher in those markets in which low-fare carriers have less than a 10 percent market share than in similar markets nationwide in which low-fare carriers have a market share of 10 percent or more.[6]

The department also cites evidence that the share of high-price tickets purchased by business travelers decreases in a market when a low-fare airline enters the market. According to the department, dominant airlines without significant low-fare competition not only charge business passengers high fares but also severely limit the availability of low-fare seats. The entry of a low-fare airline can significantly reduce business fares and increase the availability of low-fare seats for business travelers.

MAC's Efforts to Spur Competition

As a result of the various studies of airfares, the United States Congress required the operators of certain large and medium hub airports—including MAC—to submit annual competition plans to the U.S. Department of Transportation. Airports are required to submit plans for review by the Federal Aviation Administration to receive federal grants or to impose or increase passenger

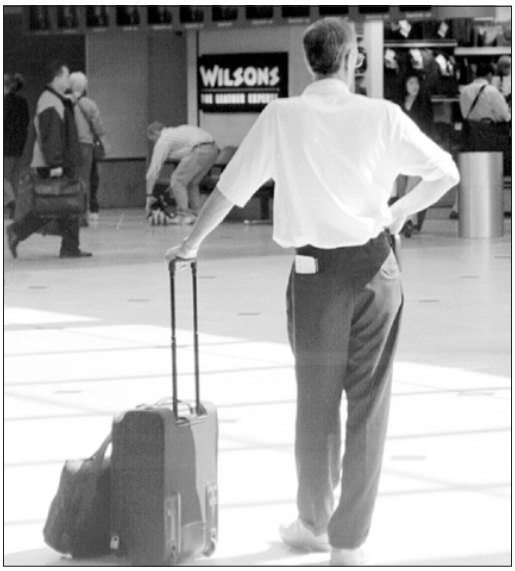
3 Metropolitan Airports Commission, *2001 Annual Report to the Legislature* (Minneapolis, April 2002), 12.

4 MSP ranked fourth highest of 13 airports examined in a Minnesota Planning report. The comparison excluded cities with more than one major airport and with high levels of seasonal or tourist travel. See Minnesota Planning, *Flight Plan: Airline Competition in Minnesota* (St. Paul, March 1999), 8.

5 One study estimated the average hub premium in the United States to be only 5 percent in 1993. This study concluded that most of the 33 percent difference between fares at dominated airports and other airports could be explained by differences among airports in the average trip distance, the typical number of plane changes, carrier-specific fare practices, the mix of business and leisure travelers, and the use of frequent flier programs. See Steven A. Morrison and Clifford Winston, *The Evolution of the Airline Industry* (Washington, D.C.: Brookings Institution, 1995), 44-49.

6 U.S. Department of Transportation, *Dominated Hub Fares* (Washington, D.C., January 2001).

facility charges. One of the main purposes of the plans is to provide information on the availability of airport gates and other facilities for airlines seeking to begin or expand service at an airport. Without gates or other facilities, a low-fare carrier would be unable to provide service.



To keep passenger fares at reasonable levels, the federal government has urged airports such as MSP to seek ways to encourage airline competition.

MAC has been criticized for the lack of available gates for new air service at MSP.

During the early and mid-1990s, MSP had the reputation of being a relatively difficult market for airlines to enter or expand in. According to a 1996 report from the General Accounting Office, MSP was one of the six airports that were most frequently cited by airlines as having competition limited by constraints in gaining access to gates.[7] Through 1998, all of the jet gates at the Lindbergh Terminal were leased using exclusive leases, which can restrict competition. Since then:

- **The Metropolitan Airports Commission has taken a number of steps to encourage competition at Minneapolis-St. Paul International Airport, but factors beyond MAC's control have limited the success of these efforts.**

Additional Gates

First, MAC has increased the number of gates at MSP, particularly by building the new Humphrey Terminal. The new terminal has 8 gates and could be expanded to 16 gates if additional gate capacity were needed.[8]

MAC has also expanded the Lindbergh Terminal, although that expansion has largely benefited Northwest Airlines and the commuter airlines that feed into Northwest flights. Table 3.1 shows that 101 of the 117 gates at the Lindbergh Terminal are leased to Northwest Airlines. Including the 8 gates at the new Humphrey Terminal, Northwest Airlines leases 81 percent of the gates at MSP.

Much of the additional capacity gained by building the new Humphrey Terminal was intended for use by Sun Country Airlines. But, as discussed in Chapter 2, Sun Country Airlines' scheduled air service was curtailed significantly within six months after the new terminal opened. The airline had lost considerable money and the effects of September 11, 2001 caused the airline to enter bankruptcy. The

7 U.S. General Accounting Office, *Airline Deregulation: Barriers to Entry Continue to Limit Competition in Several Key Domestic Markets* (Washington, D.C., October 1996), 9-12.

8 The previous Humphrey Terminal had four aircraft parking positions. Three of these parking positions had fully enclosed bridges allowing passengers to board aircraft without being exposed to outside weather conditions.

Table 3.1: Gate Assignments at Minneapolis-St. Paul International Airport, December 2002

	Leased by Northwest Airlines	Leased by Other Carriers	Available for General Use	Total	Share Held by Northwest Airlines
Lindbergh Terminal					
Large and Regional Jet Aircraft	60	16	0	76	79%
Commuter Jets and Propeller Airplanes	41	0	0	41	100
Lindbergh Terminal Subtotals	101	16	0	117	86%
Humphrey Terminal					
Charter/Scheduled Service	0	0	8	8	0%
Entire Airport	101	16	8	125	81%

SOURCE: Metropolitan Airports Commission.

airline was sold and has reverted to offering charter service and limited scheduled service. As a result, the new terminal is greatly underutilized, and its operation is being subsidized by $2.5 million in revenues from the Lindbergh Terminal during 2002. The new terminal remains available for future expansion, but its location away from the main Lindbergh Terminal may make it less desirable for certain potential entrants into the Twin Cities market.

Lease Provisions

In recent years, MAC has added gates and changed lease provisions to promote competition at MSP.

Second, the Metropolitan Airports Commission has attempted to ensure that gate capacity would be available for new entrants through the provisions it has negotiated with existing airlines. As leases have expired, MAC has worked to reduce the number of *exclusive leases* at the airport. Federal authorities discourage exclusive leases, because a preponderance of exclusive leases at a large airport can make it difficult for other airlines to gain access to gates and compete with the dominant carrier. An airline with an exclusive lease generally has control of the gate and does not have to accommodate other airlines.

Ten gates at the Lindbergh Terminal are now leased to airlines using *short-term leases* that MAC can cancel and offer to airlines that are proposing to provide additional air service at MSP. These airlines may include new entrants not currently providing service at MSP or airlines providing service at MSP but not presently leasing a gate directly from MAC. Airlines that currently have a short-term gate lease may have the short-term designation removed by showing financial regularity and an average daily gate use of seven departures per day for the preceding 12 months.

In 1999, MAC took a short-term gate—formerly Gate 43 and now Gate 4 on Concourse E—from Northwest Airlines and gave it to United Airlines. MAC leased the gate to United because of pressure from the U.S. Department of Transportation and United's promise to increase service at MSP. According to officials at Northwest Airlines, MAC's decision forced Northwest to load and unload some passengers without a fully enclosed passageway to the terminal. In

addition, the decision provided few benefits for airport passengers for some time, since United Airlines never increased service as promised.[9] MAC later took the gate back from United Airlines and leased it on a short-term basis to a low-fare carrier (American Trans Air) offering new service at MSP.

As Table 3.2 indicates, MAC now uses *preferential leases* for most of the gates for large jet aircraft at the Lindbergh Terminal. A preferential lease gives an airline the right to use a gate, but MAC may require the airline to accommodate another airline needing additional gate access. The accommodation can occur if the airline holding the lease is not fully using the gate and the proposed use of the gate by another airline is compatible with the lessee's flight schedule. MAC also requires that an airline subleasing its gate and certain other facilities to another airline may not charge a fee that is more than 15 percent higher than the airline pays MAC for the facilities.

Since 1998, MAC has significantly reduced the proportion of gates exclusively leased to one airline.

Table 3.2: Gate Leases at the Lindbergh Terminal by Type of Lease, December 2002

	Airlines	Exclusive Leases	Preferential Leases	Short-Term Leases	Totals
Jet Aircraft	Northwest	22	33	5	60
	American	0	3	1	4
	Delta	0	3	0	3
	United	0	3	0	3
	Continental	0	1	1	2
	US Airways	0	1	0	1
	American Trans Air	0	0	1	1
	Air Tran Airways	0	0	1	1
	America West	0	0	1	1
	Subtotal	22	44	10	76
Commuter Aircraft	Northwest	0	41	0	41
Totals		22	85	10	117

NOTE: Some additional airlines provide service at the Lindbergh Terminal. Continental Airlines hosts Frontier Airlines on its gates. Delta Airlines hosts Comair and SkyWest on its gates. United Airlines hosts Air Canada on its gates. In addition, Northwest Airlines hosts KLM Royal Dutch Airlines and IcelandAir on Concourse G.

SOURCE: Metropolitan Airports Commission.

The eight gates at the new Humphrey Terminal are *common use* gates—that is, they are not leased to any particular airline. MAC can assign the use of the gates on a temporary or short-term basis, depending on the needs of the airlines serving the terminal. As a result, gates would be available for use by airlines beginning or expanding service at MSP.

MAC continues to have 22 gates on Concourse G that are leased to Northwest Airlines under *exclusive leases* expiring in 2015. On 10 of the 22 gates under exclusive leases, however, Northwest Airlines is required to give regularly scheduled international flights priority over Northwest flights. These gates

9 According to MAC officials, leasing the gate to United Airlines may have benefited United's passengers by reducing crowding in its gate areas.

comprise the International Arrivals Facility that was built at the Lindbergh Terminal to replace facilities that used to be at the old Humphrey Terminal. Certain non-scheduled or delayed international charter arrivals are also permitted to use these gates but are not given preference over Northwest Airlines flights.[10]

Marketing

MAC has 1.6 full-time equivalent staff who promote the Minneapolis-St. Paul International Airport and work to attract domestic and international passenger and cargo service by full-service and low-fare airlines. MAC's efforts have helped to attract new international service by Icelandair, new domestic service by Midwest Express/Skyway, and domestic low-fare service from a number of low-fare airlines. Currently, MSP is served by four of the nation's six low-fare carriers and also has a relatively large number of charter passengers. The low-fare airlines are Frontier, AirTran Airways, American Trans Air, and Sun Country Airlines. Two of the low-fare carriers—AirTran Airways and American Trans Air—began serving MSP in 2000. Previously a charter airline, Sun Country Airlines began regularly scheduled service in June 1999 but entered bankruptcy and has considerably reduced its scheduled service. Two other low-fare carriers—Vanguard and Kiwi—provided service at MSP but left the Twin Cities market and have since gone into bankruptcy. Only two low-fare airlines—Southwest and JetBlue—do not serve MSP, although MAC staff have worked to attract service from these airlines.

MAC has also attempted to attract new air service to the Twin Cities.

Limitations

Although MAC has made numerous efforts to promote competition at MSP in recent years, the success of those efforts has been somewhat limited. While MSP has added international service from Icelandair and low-fare domestic service from AirTran Airways and American Trans Air, market factors have limited the success of other efforts. Kiwi provided service at MSP for less than three weeks. Vanguard provided service at MSP for close to six years but left MSP about five months prior to the events of September 11, 2001 and has since filed for bankruptcy protection. The expanded scheduled service provided by Sun Country Airlines lasted about a year and a half before the airline entered bankruptcy. While the events of September 11, 2001 may have helped to cause the carrier to enter bankruptcy, the airline incurred considerable financial losses prior to the terrorist attacks.

MAC's limited success has been largely due to market factors beyond its control. National studies indicate that it is difficult for airlines to enter and successfully compete in markets dominated by a single carrier. The dominant carrier may have marketing advantages—such as frequent flyer programs, travel agent incentives, or corporate incentive agreements—that other carriers cannot effectively duplicate. The flight frequency offered by the dominant carrier and its availability

10 In addition, agreements between MAC and the airlines require Northwest Airlines to accommodate other airlines needing a gate large enough to meet the needs of a scheduled wide body or Boeing 757 aircraft. The requesting airline must have signed the airline operating agreement and terminal building lease at MSP and be physically unable to accommodate such large aircraft at its own leased gates.

of flights to many locations makes the dominant carrier's frequent flyer programs more attractive to travelers.[11]

In addition, a new entrant may be reluctant to enter a dominated hub market like MSP. The entrant may fear that competitive responses by the dominant carrier—including fare reductions, increased service, or a combination of both—may prevent the entrant from earning a profit. Faced with competition from the dominant carrier, the new entrant may sustain losses for an extended period of time and run out of funds to continue operations. Because a new entrant must announce its schedule and fares well in advance of providing service, the dominant carrier has an advance opportunity to adjust its fares and strategies to compete successfully with the new entrant. Fears that this scenario will occur have deterred airlines from serving airports like MSP that are dominated by a single airline.[12]

Finally, a high percentage of newly established airlines—or airlines new to the business of providing scheduled passenger service—fail for one reason or another. Sun Country Airlines may have failed because its top management lacked experience in providing scheduled service and had a business plan destined for failure. Sun Country instituted once per day service between MSP and a large number of airports. This strategy may have been unsuccessful because it tried to serve too many cities without providing customers with an adequate choice of flight times for any of the cities.

Market factors have limited the effectiveness of efforts to attract and retain new air service.

Overall, MAC has attempted to encourage more competition at MSP in recent years, but market factors have limited the effectiveness of those efforts. The experiences of the last few years with Sun Country Airlines and with Gate 43 have provided MAC staff and commissioners with some lessons about the difficulties in attracting and retaining new air service. Until the aviation industry rebounds from its current slump, MAC is unlikely to be making decisions about expanding gate space for new entrant airlines. Currently, MSP has excess gate capacity available at the new Humphrey Terminal. That excess capacity, and the potential for future expansion of the terminal, should provide new entrants with adequate space in the foreseeable future.

RETENTION OF MINNESOTA JOBS

Minneapolis-St. Paul International Airport is one of the largest generators of economic activity in the Upper Midwest region of the United States. It has been estimated that MSP helped generate close to $9 billion in business revenues and more than $4 billion in personal income in 1999.[13]

---

11 General Accounting Office, *Aviation Competition: Challenges in Enhancing Competition in Dominated Markets*, Testimony before the Senate Committee on Commerce, Science, and Technology (Washington, D.C., March 13, 2001), 11-12.

12 *Ibid*., 11-12.

13 Martin Associates, *The Local and Regional Economic Impacts of the Minneapolis/St. Paul International Airport*, prepared for the Metropolitan Airports Commission (Lancaster, PA, June 2000).

Northwest Airlines is still one of the state's largest private employers despite recent reductions in its workforce.

Foremost among the employers at the airport is Northwest Airlines, which is headquartered in Eagan, Minnesota. In 2001, Northwest Airlines was the state's sixth largest private employer with approximately 18,000 employees.[14] The airline's number of employees in Minnesota declined from about 21,000 in 2000, when Northwest Airlines was the state's fourth largest private employer.

MAC has no direct statutory responsibility to ensure the financial well-being of Northwest Airlines. But there has generally been an expectation that MAC, while being fair to all airlines, should recognize the significant impact that Northwest Airlines has on the state's economy. In this section, we present information on the current and historical finances of Northwest Airlines and consider the impact airport operators like MAC can have on airline costs. We then discuss the federal regulations that govern the financial relationship between airport operators and airlines. Finally, we examine the ways in which MAC and the state have assisted Northwest Airlines.

Airline Finances

Since federal deregulation in the late 1970s, the U.S. airline industry has been a competitive industry with low profit margins compared with other industries. It has experienced financial losses during national recessions and periods of rising fuel prices. The industry, however, is currently experiencing its largest financial crisis ever. In 2001, the commercial passenger airline industry reported record losses of $7 to $8 billion. Some analysts are predicting similar losses in 2002 and continued losses for 2003.[15]

The airline industry experienced significant losses in 2001 and 2002, and losses are expected to continue in 2003.

The events of September 11, 2001 played a significant role in these losses, but the industry had already begun to incur losses earlier in 2001 due to a general downturn in the national economy. The number of passengers has fallen, and business travelers have resisted paying the higher fares they have typically paid. The recession and security delays at airports have had an adverse impact on airline revenues. In addition, some believe that the availability of discount tickets on internet web sites has reduced airline revenues from business travelers.

The financial performance of Northwest Airlines has been near the top of the industry. Northwest has lower costs than most of the large carriers, has aggressively implemented technological improvements like e-ticketing, and finished 2001 with the largest cash balance relative to its size among the six largest airlines.[16] In contrast, US Airways filed for Chapter 11 bankruptcy protection in August 2002, and United Airlines filed for similar protection in December 2002.[17] Nevertheless:

---

14 CityBusiness, *Fact Book: 2002 Edition* (Minneapolis, 2002), 23.

15 Anthony L. Velocci, Jr., "Chapter 11 Stalks Airlines as Sector Fights for Recovery," *Aviation Week & Space Technology* 157, no. 21 (November 18, 2002): 55-56. The losses in 2001 and 2002 even include the $5 billion in pre-tax grants given to airlines by the federal government.

16 Northwest Airlines Corporation, "Salomon Smith Barney Investor Meetings" (March 2002); http://media.corporate-ir.net/media_files/NSD/NWAC/presentations/roadshowpresentation mar02/sld001.htm…sld021.htm; accessed October 15, 2002.

17 Other smaller airlines such as Vanguard and National have also filed for bankruptcy during 2002. Flights on US Airways and United Airlines are continuing, while Vanguard and National discontinued scheduled service.

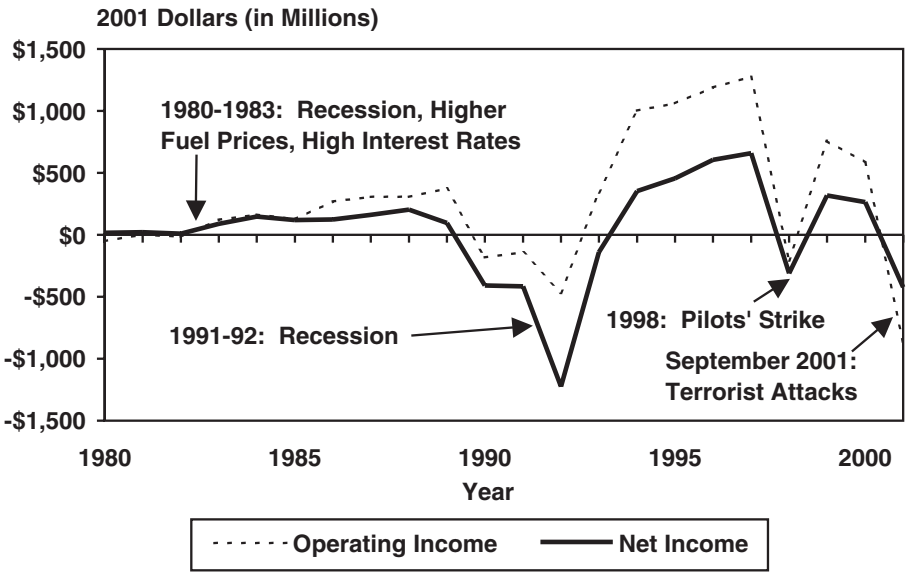
- **Like the rest of the airline industry, Northwest Airlines has experienced significant losses during 2001 and 2002.**

In 2001, the airline had operating losses of $868 million on revenues of $9.9 billion. Northwest's net loss—after adjusting for non-operating income and expenses—was $424 million. The major reason why its net loss was less than its operating loss was that it received $461 million in grants from the federal government. These grants were part of the $5 billion aid package that the U.S. Congress approved for the airline industry following the events of September 11, 2001.

Figure 3.1 shows that Northwest's operating loss during 2001 was greater (in 2001 dollars) than the loss experienced in 1992 when the company was close to bankruptcy. Its net loss in 2001, however, was less than the net loss in 1992, due in part to the financial assistance received from the federal government.

Northwest Airlines incurred significant losses in 2001 despite cost cutting and financial assistance from the federal government.

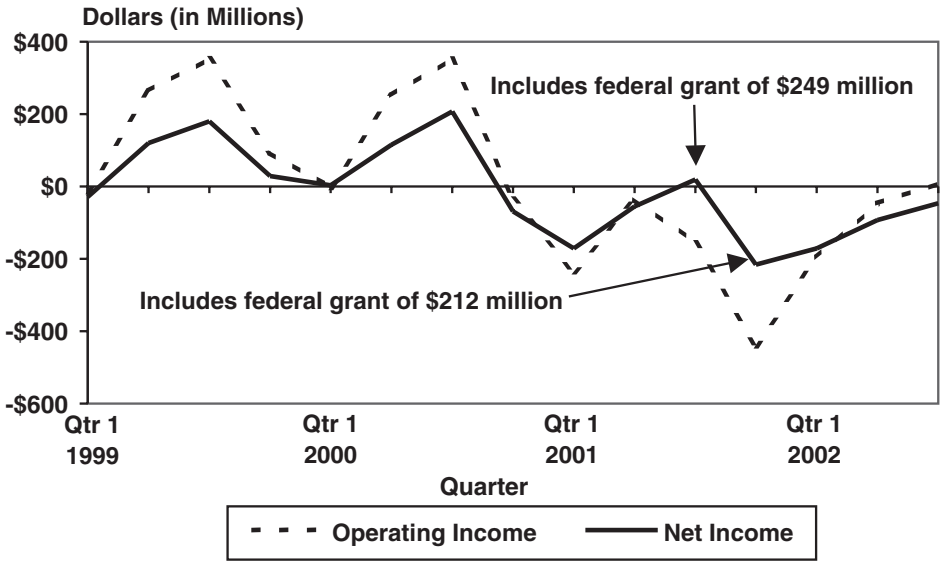
Figure 3.1: Northwest Airlines' Operating Income and Net Income in 2001 Dollars, 1980-2001



SOURCE: Northwest Airlines Corporation.

As Figure 3.2 indicates, Northwest Airlines continued to incur losses during 2002 although there has been improvement since the fourth quarter of 2001. Through the first nine months of 2002, the airline had an operating loss of $234 million and a net loss—after adjustments for non-operating revenues and expenses—of $310 million. During the third quarter of 2002, Northwest Airlines had operating income of $8 million, although it had a net loss of $46 million due largely to interest expenses. The small operating gain represented a significant improvement but came during a quarter that is typically the airline's best quarter from a financial standpoint. Travel during the summer months is usually much higher than during the rest of the year.

Figure 3.2: Northwest Airlines' Operating Income and Net Income, 1999 Through Third Quarter 2002



SOURCE: Northwest Airlines Corporation.

Most airlines will likely need to reduce their costs even further in order to survive.

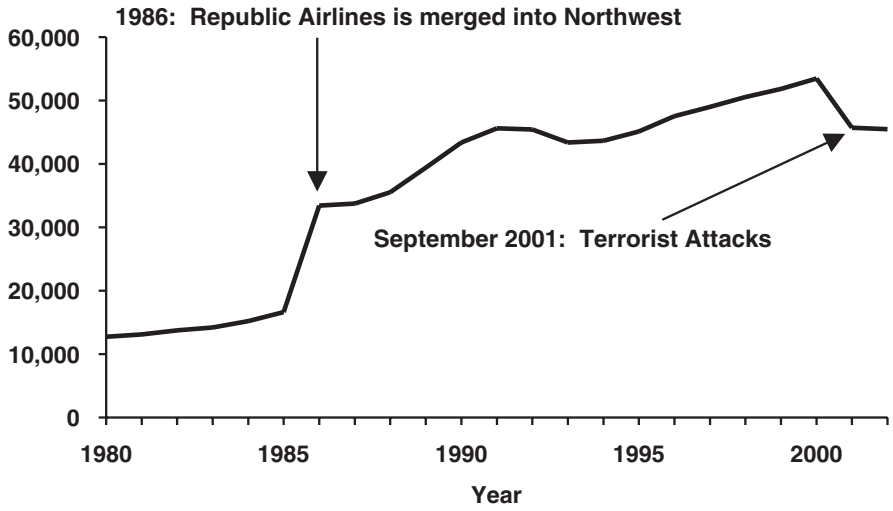
Industry experts generally believe that the airline industry will need to cut costs in order to survive financially. A national economic recovery may also help to restore the industry to profitability—as it has following previous recessions. But, some analysts believe that the large airlines may never again be able to charge business passengers the premium fares they once paid. In that case, the nation's large airlines would need to rely primarily on cost cutting to restore themselves to profitability.

Northwest Airlines has been aggressively cutting its costs and adjusting its air service. The airline reports that by next year it will have trimmed $2 billion in costs from its projected expenses. Northwest's costs have been below most other large airlines. But they have been significantly higher than those at Southwest Airlines, which is one of the few airlines that has been able to record profits.

Figure 3.3 shows that Northwest Airlines reduced its number of employees worldwide by the end of 2001. The year-end number of employees at Northwest had grown from about 33,400 at the end of 1986 following its merger with Republic Airlines to about 53,500 at the end of 2000. But Northwest Airlines reduced its workforce by about 15 percent to 45,700 employees at the end of 2001. At the end of September 2002, the airline's workforce included 45,500 employees—slightly fewer than at the end of 2001.

Given the continued financial stress in the airline industry and at Northwest Airlines, there is considerable concern among some policy makers at the national and state levels. Much of the interest in financial assistance has been focused at the national level. But questions have been raised in Minnesota about the role that

Figure 3.3: Full-Time Equivalent Employees of Northwest Airlines at Year End, 1980-2002



NOTE: Data for 2002 is based on the number of employees on September 30, 2002.

SOURCE: Northwest Airlines Corporation.

the state and the Metropolitan Airports Commission should play in assisting the airline industry and, in particular, Northwest Airlines.

It should be pointed out, however, that:

- **Any assistance MAC could provide to the airlines, including Northwest Airlines, would be small relative to the airlines' need to cut costs.**

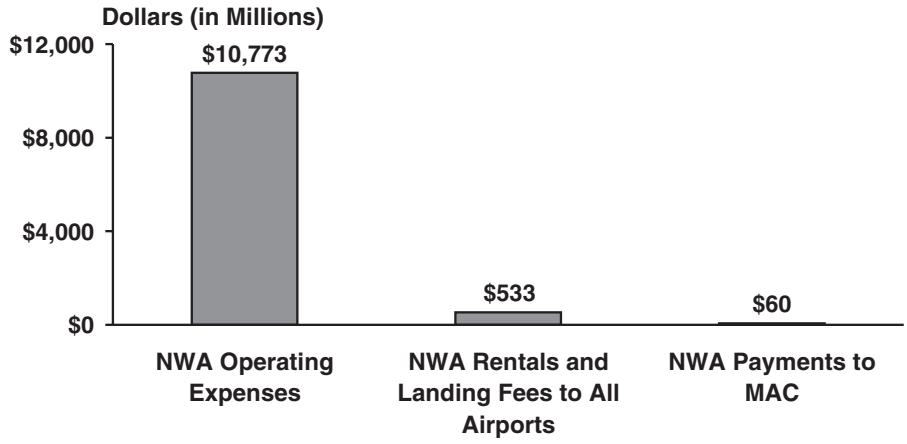
Cost reductions at MAC can help the airlines but are only a small part of the solution.

Figure 3.4 shows that Northwest Airlines had operating expenses of $10.8 billion in 2001. The airline paid landing fees and rents to airports throughout the world totaling $533 million—or less than 5 percent of its expenses. Northwest's total payments to MAC were $60 million—or less than 0.6 percent of expenses.

MAC's role in reducing airline costs will be somewhat limited since airport costs are a small portion of overall airline costs. In addition, operations at MSP are running only about 4 percent lower than during 2000. Also, MAC has continued, with support of the airlines, to implement much of the 2010 plan, so terminal and other facilities have increased in size and cost at MSP.

Nevertheless, as we pointed out in Chapter 2, it is important for MAC to keep cost increases to a minimum during this time when airlines are struggling financially. The MAC staff's proposal for a 12 percent increase in airport operating expenses during 2003 seemed out of step with conditions in the airline industry and was not adequately justified. Ultimately, the commission decided to keep estimated airline charges from increasing during 2003 by using $3.3 million from 2002 parking and concession revenues to offset the impact of the 6 percent increase in expenses

Figure 3.4: Northwest Airlines' Annual Operating Expenses Compared With Annual Payments to Airports, 2001



NOTE: NWA payments to MAC exclude lease payments related to the 1992 special bond issue.

SOURCE: Northwest Airlines and Metropolitan Airports Commission.

included in the adopted budget. The airlines serving MSP have supported the commission's decision, although we question whether MAC staff provided adequate information to support even a 6 percent increase in operating expenses. Commissioners and staff have said that they will continue to look for cost savings during 2003.

Federal Restrictions

The federal government restricts the type of financial assistance that airports can provide to airlines.

Federal laws and rules impose some restrictions on the degree to which airports can assist airlines. Airport operators are prohibited from directly subsidizing air service. An airport may offer fee waivers or discounted fees during a promotional period during which a new service is being provided. But the airport must offer that waiver or discount to all users of the airport willing to provide the same type and level of new services.

In addition, an airport receiving federal assistance is required to charge airlines fees and rents that make the airport as self-sustaining as possible. Generally, the fees and rents charged to airlines should reflect the costs of providing facilities and services. But, a fee schedule that recovers less than the costs of services to airlines is permitted if the airport's total revenues are sufficient to cover its total costs.[18] MAC's lease agreements with the airlines at MSP are designed to recover revenues sufficient to cover the costs of facilities and services used by the airlines.

18 Policies and Procedures Concerning the Use of Airport Revenue, 64 *Fed. Reg.* 30, 7720-7721 (1999). Federal rules also state that an airport operator should establish long-term goals to make an airport as self-sustaining as possible, if market conditions or demand for air service do not permit the airport to be completely self-sustaining.

In most years, MAC's operating revenues have exceeded its operating expenses.[19] The agency's excess revenues have generally been used for construction projects at MSP and MAC's reliever airports.

MAC Assistance

Perhaps the most important thing that an airport can do for the airlines is to effectively and efficiently operate the airport. An airport operator needs to effectively run the airport so that airline operations are facilitated and airplane delays are kept to a minimum. Northwest Airlines and others acknowledge that MAC has performed well in this regard. MAC has effectively performed snow removal and other maintenance at MSP so that airline operations can proceed as smoothly as possible. As we saw in Chapter 2, MAC has generally been an efficient airport operator as well. The costs of operating MSP compare favorably with most other airports. Despite the airport's lower than average operating costs, MAC has been recognized for its effective operations at MSP. The International Air Transport Association has named MSP the best large North American airport in overall customer satisfaction for the last three years, 1999-2001.

The airlines have legitimate concerns about the increasing costs of operating MSP. But it should be recognized that:

- **The state and the Metropolitan Airports Commission have provided significant financial assistance to the airlines, particularly Northwest Airlines, in the past.**

Northwest Airlines benefited from state-authorized bonds issued in 1992 and MAC's refinancing of those bonds in 2002.

The 1991 Legislature authorized MAC to issue general obligation revenue bonds to assist Northwest Airlines during an earlier financial crisis. The $270 million in bonds were used to finance the purchase of certain flight training facilities and related real and personal property owned by Northwest Aerospace Training Corporation, Northwest Airlines, and NWA Inc. The properties and equipment were then leased back to these parties with lease payments equal to the debt service on the bonds. This bond issuance provided Northwest Airlines with a capital infusion at a time that it needed cash. As part of the deal negotiated with the Legislature, Northwest agreed to build an aircraft maintenance base in Duluth and reservation center in Hibbing.[20]

In January 2002, MAC refinanced the bonds issued in 1992 at a lower interest rate. The refinancing will save Northwest Airlines $37 million over the 20-year life of the bonds.[21] In addition, MAC agreed to delay reappraising the facilities and equipment that Northwest Airlines put up as collateral. The real property and fixtures were last appraised in March 2001, while the personal property was last appraised in 2000. MAC felt that appraisals of the collateral property should not be conducted for a period following September 11, 2001. The impact of

19 At MSP, MAC's revenues have generally exceeded expenses, but some of that excess revenue is used to subsidize the operation of MAC's reliever airports. In 2001, MAC's operating revenues at its reliever airports covered only about one-third of its operating expenses, including depreciation.

20 The location of the reservation center was later changed to Chisholm.

21 MAC staff calculate the amount of savings to Northwest Airlines to be about $53 million over the life of the bonds. Using a 6.6 percent discount rate, they estimate the savings to be about $37 million on a present-value basis.

September 11 would make it difficult to appraise the property until the future status of the airline industry was more apparent.

To help the airlines, MAC agreed to depreciate construction projects over a longer than usual time period and defer the start of cost recovery for certain projects until 2006.

In addition, prior to the current financial crisis in the airline industry, MAC negotiated new airline operating agreements and terminal building leases with airlines serving MSP. These agreements, which became effective in 1999, provide the airlines with significant current relief from increased rates and charges that would otherwise have occurred due to MAC's implementation of the 2010 plan. The agreements require that charges for certain construction costs that would have been added to airline rates after January 1, 1999 be depreciated over a longer period than would generally be the case. For example, the costs of terminal building projects involving building or structural changes are being depreciated over 30 years rather than the usual 20 to 25 years. Ramp and runway projects are similarly being depreciated over 30 years.

Besides lengthening the period over which costs are being recovered, MAC agreed to defer the recovery of any costs associated with certain construction projects in the 2010 plan. Specifically, MAC deferred starting its recovery of about $50 million in costs involved in constructing the North/South runway until 2006. MAC was originally planning completion of the runway for 2003, but completion has been delayed until 2004. In addition, MAC is deferring until 2006 the start of the recovery of about $122 million in project costs from the extension of Concourse C and the construction of Concourses A and B. These areas opened in mid-2002 and are leased to Northwest Airlines.

The airlines will pay the full cost of these construction projects, including interest for the deferral or extended depreciation periods. But the airlines—particularly Northwest Airlines—are receiving some significant relief during the current financial crisis. Some of the fees they would otherwise be paying are being deferred to future years when observers hope the industry will be in better shape.

The start of the cost recovery for new terminal facilities built for Northwest Airlines is being deferred until 2006.

It should be noted that these lease provisions are not without risk to MAC and airport users, and even potentially to taxpayers. Some of the charges are being deferred and will not be fully recovered until 2035. At some point in the future, MSP may cease to be a viable airport if demand for travel increases like it did during the 1990s. The state may need to consider building a new airport if the existing one can no longer meet the demand with acceptable delay times. The further into the future that obligations on the existing airport are deferred, the more difficult it will be for MAC and the airlines if a new airport needs to be built and financed. In addition, deferring the charges may increase the risk that MAC will not be fully paid for these construction projects should Northwest Airlines, or other airlines serving MSP, go out of business.

4 Airport Noise

SUMMARY

The Metropolitan Airports Commission (MAC) has implemented one of the most extensive noise mitigation programs among U.S. airports, and it plans to extend the program to additional areas starting in 2005. Some people think that MAC's policies for the expanded program will not fulfill its 1996 commitments. But MAC's commitments in written documents were vague and subject to interpretation, and the planned program (if approved by the federal government) would be ambitious compared with programs at other airports.

For the existing sound insulation program, MAC still uses federally-approved 1992 projections of 1996 noise levels to determine eligibility. Several key assumptions underlying the projections proved to be off-target by the mid-1990s, so some homes that were subject to significant noise have not been eligible for insulation. The course of action prescribed in federal rules (a new forecast and noise contour) would not necessarily have resulted in expanded program eligibility, due to recent reductions in aircraft noise levels. Updates of the projections were delayed by uncertainties in the 1990s regarding the airport's future and by significant changes in the airline industry over the past two years.

For people who live near airports, noise from aircraft can be a significant intrusion—potentially interrupting sleep, conversations, and other aspects of daily life. State law establishes a goal to "minimize the public's exposure to noise and safety hazards around airports" and provide for noise abatement.[1] MAC uses a variety of approaches to mitigate the impact of airport noise, but a primary mechanism over the past decade has been a program to structurally modify homes and schools. In this chapter, we address the following questions:

- **What commitments regarding noise mitigation were made at the end of the dual track airport planning process? Has the Metropolitan Airports Commission fulfilled these commitments?**

- **How accurate were the noise projections underlying MAC's existing sound insulation program? What are the implications, if any, in cases where MAC's noise projections were incorrect?**

1 *Minn. Stat.* (2002), §473.602.

- **Which homes are eligible to participate in the Minneapolis-St. Paul Airport's sound insulation program? How does the scope of this program compare with those implemented elsewhere?**

- **What has been the trend in noise levels at locations near the Minneapolis-St. Paul International Airport?**

- **Why did maps that MAC developed for a draft noise mitigation plan in 2000 differ from the final maps that were submitted to the federal government in 2001? Was the public adequately informed about these changes?**

This chapter focuses primarily on MAC's sound insulation program and the noise projections that determine eligibility for the program. We did not evaluate other strategies that can affect airport noise, such as procedures governing runway use and flight departures.

BACKGROUND

Federal policy discourages excessive noise levels.

In 1968, the U.S. Congress authorized the federal government to prescribe standards for measuring aircraft noise and to regulate noise abatement.[2] Congress subsequently stated that "it is the policy of the United States to promote an environment for all Americans free from noise that jeopardizes their health or welfare."[3] Still later, Congress authorized the Federal Aviation Administration (FAA) to regulate "airport noise compatibility planning" and make funds available for airports' noise-related projects.[4]

Noise can be measured in decibels, ranging from the threshold of human hearing (0 decibels) to painful noise (about 130 decibels). Some examples of decibel levels include:

- A normal conversation between two people who are five feet away is about 60 decibels;

- A vacuum cleaner three feet away is about 70 decibels;

- A power lawn mower three feet away is more than 90 decibels; and

- An ambulance siren 100 feet away is about 100 decibels.

2 Aircraft Noise Abatement Act, Pub. L. 90-411 (1968), codified as amended in 49 U.S. Code §44715 (2000).

3 Noise Control Act, Pub. L. 92-574, sec. 2(b) (1972), codified in 42 U.S. Code §4901 (2000).

4 Aviation Safety and Noise Abatement Act, Pub. L. 96-193 (1979), codified as amended in 49 U.S. Code §§47501-47510 (2000).

People perceive a six to ten decibel increase as a doubling of loudness, so an 80-decibel noise would sound twice as loud as a 70-decibel noise. [5]

Large planes had to comply with quieter noise standards by 2000.

The federal Airport Noise and Capacity Act of 1990 required the conversion of the entire U.S. fleet of aircraft over 75,000 pounds to "Stage 3" noise standards by 2000.[6] For a given class of aircraft, Stage 3 standards are quieter than the previous "Stage 2" standards.[7] To comply with the federal requirements, airlines had to either retire or remanufacture ("hushkit") their Stage 2 aircraft. (The term "hushkitting" is often used to describe modifications to a Stage 2 plane's engines or engine enclosures to reduce noise to a level sufficient to achieve a Stage 3 classification.) Typical Stage 2 aircraft (such as Boeing 727s and DC-9s) generated peak noise levels upon takeoff of 98 to 102 decibels, as measured under the flight path four miles from the point of departure. In contrast, Stage 3 aircraft such as Boeing 757s and Airbus 320s have peak noise levels in the 87 to 91 decibel range from this distance.[8] Many of the Stage 2 planes that were modified to meet Stage 3 standards are among the noisiest Stage 3 aircraft.

Airports can get federal funds for noise-related projects if they obtain federal approval of programs pursuant to Federal Aviation Regulation Part 150.[9] These noise mitigation programs are commonly called "Part 150" programs. To get federal approval, airports must comply with regulations that prescribe methods for developing (1) "noise exposure maps" of the areas around airports, and (2) programs for reducing and preventing land uses that are not compatible with airport noise. Participating airports must develop the noise exposure maps using "a single system of measuring noise at airports for which there is a highly reliable relationship between projected noise exposure and surveyed reactions of people to noise."[10] For airports seeking federal noise mitigation funds, federal regulations prescribe a model (called the "Integrated Noise Model") and a noise metric (called "DNL," or day-night levels) to determine individuals' cumulative exposure to airport noise. In contrast to decibels—which measure the sound level of a single event—DNL represents a yearly *average* of sound levels over a 24-hour period.[11] The DNL metric also incorporates a ten-decibel penalty for each noise event that

---

5 Two equally loud noises (such as two 70-decibel noises) would produce a noise level only three decibels louder (73 decibels) than one of the noises. Two unequal noises would produce a combined noise level just slightly above that of the louder source.

6 Airport Noise and Capacity Act of 1990, Pub. L. 101-508 (1990), codified as amended in 49 U.S. Code §§47521-47533 (2000).

7 Some of the larger Stage 3 aircraft generate higher noise levels than certain Stage 2 aircraft. In general, however, the new requirements resulted in reduced noise levels within various categories of planes.

8 These noise levels are based on Federal Aviation Regulation Part 36, peak levels documented per aircraft type during takeoff, measured in Effective Perceived Noise Level A-weighted decibels. See MAC, *Draft Technical Advisor's Report: Minneapolis-St. Paul International Airport* (Minneapolis, September 2002), 6, http://www.macnoise.com/pdf_files/monthly_reports/sep02_ta.pdf; accessed November 20, 2002.

9 Pursuant to the Aviation Safety and Noise Abatement Act of 1979, the federal government promulgated interim Part 150 regulations in 1981 and final regulations in 1985. See 14 *CFR* ch. 1, part 150 (2001). Airports are not required to seek federal funds for noise mitigation.

10 14 *CFR* ch. 1, part 150, A150.1 (2001).

11 In 1980, the Federal Interagency Committee on Urban Noise adopted DNL as the metric for noise studies.

occurs between 10 p.m. and 7 a.m.—to reflect the added intrusiveness of nighttime noise. Airports seeking Part 150 federal funds must use the Integrated Noise Model to determine the location of "continuous contours"—that is, boundary lines—for DNL levels of 65, 70, and 75. They may develop contours for other DNL levels "when appropriate,"[12] but federal assistance for projects addressing noise below 65 DNL is considered lower priority.[13]

A map of projected noise at the Minneapolis-St. Paul Airport for 1996 still determines eligibility for MAC's sound insulation program.

The Metropolitan Airports Commission submitted to the federal government its first Part 150 study for the Minneapolis-St. Paul Airport in 1987.[14] MAC prepared another Part 150 study in 1992 to address implementation of the noise measures previously approved by the Federal Aviation Administration and suggest additional strategies. The 1992 submission included updated noise maps, and Figure 4.1 shows the boundaries of the 65 DNL noise contour projected for 1996. The 1996 map is the most recently-approved noise exposure map for Minneapolis-St. Paul International Airport, and it is still used to determine eligibility for the airport's home insulation program. (Areas within the 65 DNL contour are eligible for sound insulation.)

MAC has used "passenger facility charges" to pay for about 80 percent of the cost of insulating homes within the 65 DNL contour. MAC has federal approval to assess these charges to each passenger using the Minneapolis-St. Paul Airport, and airlines collect these charges for MAC when air travelers purchase their tickets. The remainder of the residential sound insulation program's cost has been paid from federal funds, based on MAC's federally-approved participation in the Part 150 program.

NOISE MITIGATION COMMITMENTS

Following several years of discussion and debate about whether to build a new airport in the Twin Cities region, the 1996 Legislature decided to keep the Minneapolis-St. Paul International Airport at its present location. To address the need for greater capacity at the airport, the Legislature required MAC to implement a 2010 long-term comprehensive plan that included construction of a new runway and various other capital improvements at the terminal and airfield.[15] The Legislature also required MAC to study the environmental effects of the plan, including noise impacts and land use compatibility.[16] Table 4.1 identifies key events related to airport noise that have occurred since 1996.

---

12 14 *CFR* ch. 1, part 150, A150.101 (2001).

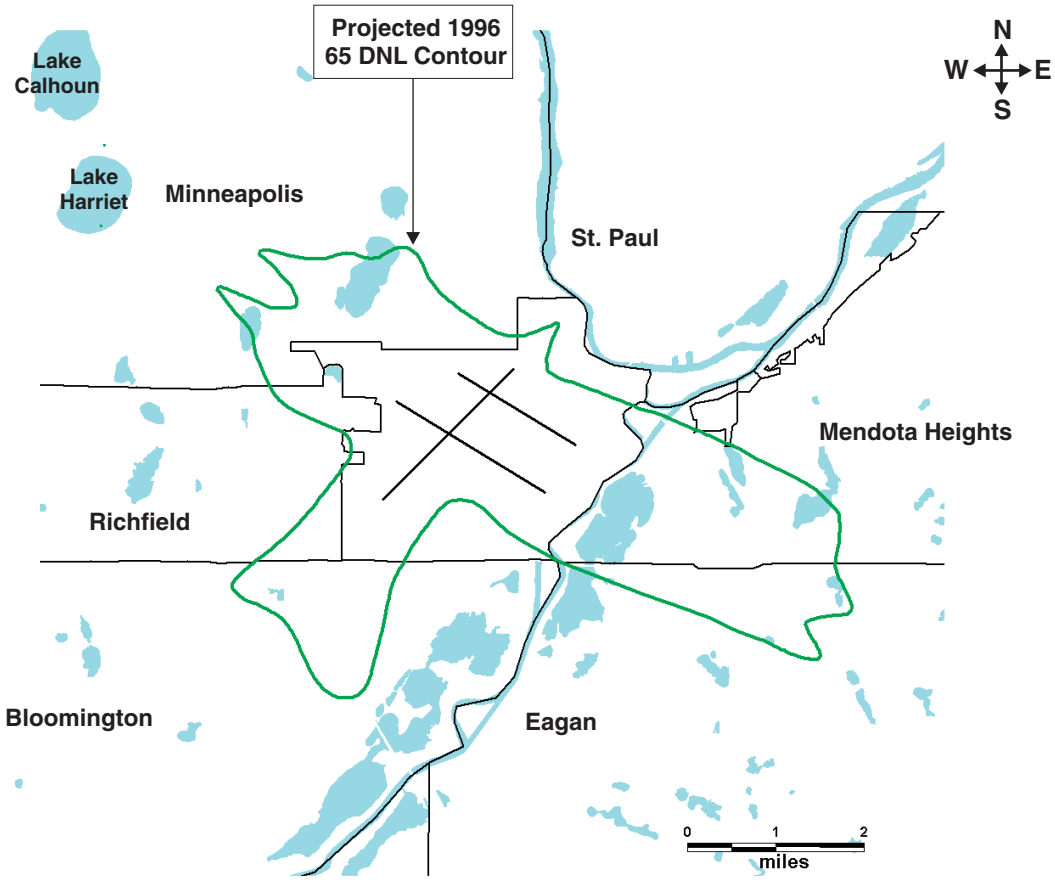
13 Federal Aviation Administration Order 5100.38B, *Airport Improvement Program Handbook*, ch. 8, sec. 1, para. 810.

14 The Federal Aviation Administration approved the noise exposure maps in 1989 and the noise compatibility program in 1990—although FAA disapproved several components of MAC's proposed noise compatibility program.

15 *Laws of Minnesota* (1996), ch. 464, art. 3, sec. 6.

16 *Laws of Minnesota* (1996), ch. 464, art. 3, sec. 11.

Figure 4.1: MAC's 1992 Projection of Area with 1996 Noise Levels of 65 DNL or Greater



NOTE: Areas inside the contour line were projected to have noise levels of 65 DNL or greater.

SOURCE: HNTB, *FAR Part 150 Study Update* (Minneapolis: Metropolitan Airports Commission, March 1992).

To address concerns about the impact of airport noise on nearby neighborhoods, the 1996 Legislature required the following:

> The [Metropolitan Airports Commission], with the assistance of its sound abatement advisory committee, shall make a recommendation to the state advisory council on metropolitan airport planning regarding proposed mitigation activities and appropriate funding levels for mitigation activities at Minneapolis-St. Paul International Airport and in the neighboring communities. The recommendation shall examine mitigation measures to the 60 [DNL] level.[17]

17 *Ibid.*

In 1996, MAC decided to expand its sound insulation program, but the nature of its commitment has been in dispute.

Table 4.1: Recent Events in MAC's Noise Mitigation Program

April 1996:	Legislature decided to expand existing airport rather than build a new one, and it asked MAC to prepare recommendations on noise mitigation.
October 1996:	MAC recommended continuation of its sound insulation program in the 65+ DNL area and expansion of the program to the 60-64 DNL area.
May 1998:	MAC submitted the dual track planning process' final environmental impact statement to the Federal Aviation Administration, including analysis of impacts from a new runway.
September 1998	Federal Aviation Administration approved MAC's environmental impact statement.
January 1999:	New operating agreement between MAC and airlines at Minneapolis-St. Paul International Airport contained agreements on funding levels for noise mitigation through 2010.
	MAC started to update its federal Part 150 noise mitigation program, last revised in 1993.
November 2000:	MAC issued a draft of its Part 150 report, including a projected noise exposure map for 2005.
August 2001:	MAC adopted a policy on its forthcoming 60-64 DNL noise mitigation program—to provide "full" mitigation to homes until the program budget is spent.
November 2001:	MAC submitted its final Part 150 report to the federal government.
December 2001:	MAC rescinded its August 2001 policy on the 60-64 DNL program.
April 2002:	MAC adopted a new policy for noise mitigation in the 60-64 DNL area—offering different levels of benefits for the 60-62 and 63-64 DNL areas.
May 2002:	MAC withdrew its November 2001 Part 150 report to the federal government so that noise forecasts could be updated.

SOURCE: Office of the Legislative Auditor.

MAC formed a Noise Mitigation Committee, comprised of six MAC commissioners, eight city representatives (including seven mayors), two Metropolitan Council members, one Northwest Airlines representative, and one member of MAC's ongoing sound abatement advisory committee. After considering input from the Noise Mitigation Committee, MAC adopted noise mitigation recommendations for the airport in October 1996. As required by law, MAC submitted the recommendations to the State Advisory Council on Airport Planning, which concurred with the recommendations.[18]

18 This council was established by the 1989 Legislature "to provide a forum at the state level for education, discussion, and advice to the legislature on the reports prepared for the legislature by the metropolitan council and metropolitan airports commission" (*Laws of Minnesota* (1989), ch. 279, sec. 7.) The council had 21 voting members, including 6 legislators. Two legislators co-chaired the council.

Airport noise mitigation programs are defined, in part, by the boundaries of the areas they address, and two of MAC's 1996 recommendations addressed the scope of the home insulation program. First, MAC recommended that the residential sound insulation program for the area with projected 1996 DNL levels of 65 and higher (see Figure 4.1) should be completed on the existing schedule (by 2000). Second, MAC recommended that "the program be expanded after completion of the current program to incorporate the area encompassed by the 2005 60 DNL."[19] MAC said that completion of its sound insulation programs would be contingent on its ability to maintain at least an "A" bond rating. MAC recommended funding its noise abatement programs at levels exceeding $25.5 million per year, using a combination of airport revenues. "To the extent that MAC cannot fund this expanded program in a reasonable period of time," MAC said, "support from the State of Minnesota should be sought."[20]

At the outset of our study, legislators asked us to examine whether MAC has fulfilled its noise mitigation commitments—particularly with respect to the "expanded" portion of the program, in the DNL 60-64 area. To better understand the nature of the noise commitments, we reviewed MAC documents and meeting minutes, and we interviewed most members of MAC's 1996 Noise Mitigation Committee. We found that:

- **MAC's initial commitments to expand its noise insulation program to homes with noise in the DNL 60-64 range were vague and subject to various interpretations.**

We found no evidence of explicit commitments by MAC to provide identical noise mitigation to all insulated homes.

In October 1996, MAC voted to expand "the [existing 65+ DNL] program" to the 60-64 DNL area, but it did not specify the nature of the expanded program. Some members of MAC's 1996 Noise Mitigation Committee told us that they thought that the commitment to expand "the program" meant that MAC intended for the 60-64 DNL program to be identical to the 65+ DNL program. In particular, they thought that all homes in the 60-64 DNL area would receive identical, *"full"* mitigation—that is, sound insulation that would absorb at least five additional decibels of external noise in homes.[21] (They made this assumption partly because MAC had considered but rejected the idea of a less stringent sound insulation program in the 54-60 DNL area—that is, a program that would have aimed for only a three-decibel reduction in noise. Consequently, MAC's final 1996 noise recommendations made no reference to a "reduced" noise program in any area, including the 60-64 DNL area.)[22] However, our review of documents and meeting minutes found no conclusive evidence that MAC explicitly committed to provide identical noise mitigation to all homes in the areas with noise levels of 60 DNL or greater.

---

19 MAC, *MSP Noise Mitigation Program* (Minneapolis, November 1996), 2.

20 *Ibid.*

21 Without the treatments available through the sound insulation program, the average home in the Minneapolis-St. Paul area reduces the exterior to interior noise levels by about 27 decibels. MAC's goal for the sound insulation program in the 65+ DNL area was to provide an additional five-decibel reduction in interior noise.

22 MAC's 1996 policy recommendations addressed mitigation for homes with DNL levels of 60 or greater. MAC decided not to recommend mitigation for homes with DNL levels less than 60.

A 1999 agreement between MAC and the airlines authorized significant spending for noise mitigation.

In 1999, MAC negotiated an agreement with airlines operating at Minneapolis-St. Paul International Airport that reiterated the earlier commitment to fund a noise mitigation program in the 60-64 DNL area. The agreement authorized MAC to spend $150 million (in 1998 dollars) for the 60-64 DNL program ($70 million from the airlines and $80 million from MAC general revenues).[23] However, the agreement's descriptions of the expanded noise program may have added to confusion about the nature of MAC's commitment. First, the agreement's estimate of costs per home for the 60-64 DNL noise mitigation program ($37,100) were identical to the agreement's cost estimates for the 65+ DNL program—perhaps giving the impression that the 60-64 DNL program would employ mitigation strategies identical to those used in the 65+ DNL program. Second, the agreement stated that MAC and the airlines would fund a noise mitigation program within the "1996 DNL 60 contours." MAC officials contend that the inclusion of "1996" in this program description was a mistake—and that MAC always intended to insulate homes in the 60-64 DNL area based on *updated* noise contours, not the 1996 contours.[24] Because airport noise levels have decreased in recent years, a program based on 1996 noise contours would insulate more homes than a program based on updated noise contours.

In 1999, MAC began a process of updating the noise exposure maps and noise mitigation program for the Minneapolis-St. Paul International Airport. MAC later held public hearings to discuss this Part 150 update, including options for the sound insulation program in the 60-64 DNL area. Table 4.2 shows the options that were considered by MAC, and their estimated costs ranged from $136 million to $452 million. Several of these estimates far exceeded MAC's 1996 "high" estimate of 60-64 DNL program costs—$144 million for single-family homes.[25]

In August 2001, MAC voted 8 to 7 to adopt Option 1 for the 60-64 DNL area (based on noise projections for 2005), subject to a spending cap. That is, MAC planned to begin insulating homes in the portions of the 60-64 DNL area with the most noise and then move to lower noise areas—but the program would end when MAC spent $150 million (in 1998 dollars). This strategy would have provided "full" insulation to some homes, but a majority of homes in the 60-64 DNL area would have received no insulation. Consequently, some people contended that MAC's policy betrayed earlier commitments.

---

23 MAC, *Airline Operating Agreement and Terminal Building Lease, Minneapolis-St. Paul International Airport, Effective January 1, 1999*, Exhibit 1, 6.

24 For example, the policies on noise mitigation that MAC adopted in 1996 favored expansion of the sound insulation program "to incorporate the area encompassed by the 2005 60 DNL." See MAC, *MSP Noise Mitigation Program* (Minneapolis, November 1996), 2. Also, MAC must still seek federal approval of a plan to insulate homes in the 60-64 DNL area, and federal officials will expect this plan to reflect an updated noise map.

25 The increase in estimated costs reflected changed assumptions about the average cost per home and the number of homes to be insulated. Later in this chapter, we discuss the increased cost per home for the 65+ DNL program. Regarding the number of homes to be insulated, MAC estimated in 1996 that between 3,943 and 6,357 single family homes would be in the 2005 DNL 60 contour; in contrast, MAC estimated in 2002 that more than 8,000 homes would be insulated in this contour. MAC staff attributed this change to improved information from Hennepin County regarding the number of homes within certain geographic areas.

Table 4.2: Sound Insulation Options Considered by MAC for the 60-64 DNL Area, 2001

Option 1: Five-Decibel Reduction Package

Description: Provide the same five-decibel reduction that has been offered to homeowners in the 65+ DNL area. The program would provide window and door treatments, wall and attic insulation, air conditioning, roof vent baffling, and modifications to address indoor air quality and ventilation.

Estimated cost: $451.8 million ($45,000 per home)

Option 2: Three-Decibel Reduction Package

Description: Provide the same sound insulation provided to homes in the 65+ area, but establish a lower acoustical standard for window and door treatments.

Estimated cost: $441.8 million ($44,000 per home)

Option 3: Window, Door, and Vent Package—No Air Conditioning

Description: Provide the same sound insulation provided to homes in the 65+ DNL area—except for air conditioning. *With the windows closed*, this package would provide the same noise reduction as Option 1.

Estimated cost: $339.4 million ($33,800 per home)

Option 4: Window Package

Description: Provide prime window treatment/replacement, new acoustical storm windows, and modifications to address indoor air quality and ventilation. This package would *not* include air conditioning, door treatment/replacement, wall and attic insulation, or roof vent baffling modifications.

Estimated cost: $271.1 million ($27,000 per home)

Option 5: Homeowner Participation Package

Description: Provide the five-decibel reduction package offered to homes in the 65+ DNL area (averaging $45,000 per home). However, homeowners would share in the cost—ranging from 14 percent of costs for homes at 64 DNL to 70 percent of costs for homes at 60 DNL.

Estimated cost: $206.7 million (MAC's share)

Option 6: Air Conditioning Package

Description: Provide central air conditioning, if not already present. This would enable homeowners to close their windows during warm weather months.

Estimated cost: $135.5 million ($13,500 per home)

SOURCE: Nigel D. Finney, MAC deputy executive director for planning and environment, memorandum to MAC Planning and Environment Committee, *Part 150 Sound Insulation Program—60-64 DNL Contour*, May 30, 2001.

In 2001-02, MAC considered several options for its expanded noise mitigation program.

In December 2001, MAC voted to rescind its August 2001 decision regarding the 60-64 DNL program. Following additional discussions by the commission, MAC voted unanimously in April 2002 to adopt a tiered mitigation program for the 60-64 DNL area:

- In the 63-64 DNL contours (based on noise projections for 2005), MAC would provide "full" mitigation (Option 1 in Table 4.2).

- In the 60-62 DNL contours, MAC would provide air conditioning (if needed) or reimbursement for sound insulation improvements up to the value of air conditioning installation. Based on acoustical testing, MAC

would provide additional mitigation if necessary to help houses meet an interior noise level of 45 DNL.[26]

Based on noise projections for 2005, MAC estimated that the 60-64 DNL sound insulation program approved in April 2002 would provide benefits of varying levels to about 8,000 homes. By contrast, the program that MAC approved in August 2001 (and then rescinded) would have provided benefits to only about 3,300 homes in the 60-64 DNL area.

The commission committed in May 2002 to spend $150 million for the 60-64 DNL program, consistent with the 1999 airline agreement.[27] At the same time, the commission voted to revise the forecasts that had been used in 2001 to estimate future noise contours. MAC decided that recent changes in the airport's number of operations and fleet mix justified a re-estimation of the noise contours. Thus, MAC withdrew its 2001 Part 150 submission to the federal government (which included noise exposure maps for 2005). MAC anticipates that it will submit a revised Part 150 report to the federal government this year, containing projected noise contours for 2007.

Since 1996, MAC has moved from a vague commitment to expand the sound insulation program to a more clearly defined policy. During this time, MAC's vacillation about the 60-64 DNL noise policy and its decision to withdraw the 2001 Part 150 noise mitigation proposal have probably contributed to public confusion about which homes will be eligible for mitigation. Overall, however, we conclude that:

- **In 2002, MAC adopted a policy for sound insulation in the 60-64 DNL area that was ambitious, did not violate earlier written commitments, and was significantly less expensive than some other options that were considered.**

The scope of MAC's expanded noise mitigation program would be unprecedented among major airports.

MAC's program is ambitious because it would be unprecedented among major U.S. airports. For airports choosing to participate in the federal Part 150 program, there are no requirements for airport noise mitigation in areas with noise levels below 65 DNL. Few U.S. airports provide any noise insulation in the 60-64 DNL area, and no airport has a program in this area as extensive as that proposed by MAC.[28] Some local officials told us that they expected MAC's 60-64 DNL program to be more extensive than what was proposed, yet MAC commissioners representing even the most noise-affected areas voted in 2002 in favor of the policy.

---

26 In 1974, the U.S. Environmental Protection Agency (EPA) declared that 45 DNL was a noise level at which there were no adverse effects on public health and welfare due to interference with speech or other activity. EPA noted that this threshold was developed using a conservative approach and that it should not be construed as a standard for regulatory purposes.

27 In April 2002, MAC adopted a policy that would have allowed it to spend less than $150 million if the cost of completing the 60-64 DNL program did not require $150 million. The Metropolitan Council then threatened to not approve MAC's entire capital program if MAC retained this policy. In May 2002, MAC reaffirmed its commitment to spend $150 million for the 60-64 DNL program.

28 San Jose International Airport provides insulation treatments to homes in the 60-64 DNL area that have interior noise levels exceeding 45 decibels. Two airports in Hawaii offer insulation within the 60-64 DNL area to a small number of homes. Cleveland Hopkins International Airport plans to insulate 3,000 or more homes in the 60-64 DNL area, depending on the level of funding available for the program.

Some airline officials told us that the 60-64 DNL program is unnecessary and should be deferred, particularly in light of the airlines' current financial difficulties. However, the proposed program is consistent with prior financial commitments by MAC and the airlines, as expressed in the 1999 airlines operating agreement. In 2002, the Metropolitan Council threatened to hold up MAC's capital program if it did not clarify its intent to spend the $150 million (in 1998 dollars) cited in the airlines operating agreement—and MAC reiterated its commitment. It is also worth noting that MAC made decisions in 2001 and 2002 about the scope of the 60-64 DNL program following systematic consideration of alternatives and their costs; in contrast, MAC's initial program commitments in 1996 were based on very limited discussions of these topics.

Finally, we examined whether MAC has fulfilled previous expenditure commitments regarding its *existing* noise mitigation program in the 65+ DNL area. The 1996 Legislature required that:

> From 1996 to 2002, the commission shall spend no less than $185,000,000 from any source of funds for insulation and accompanying air conditioning of residences, schools, and other publicly owned buildings where there is a demonstrated need because of aircraft noise; and property acquisition, limited to residences, schools, and other publicly owned buildings, within the noise impacted area.[29]

We reviewed MAC expenditures and found that:

Over the past two decades, MAC has spent nearly $300 million on noise mitigation.

- **MAC has spent about $210 million on sound insulation and property acquisition since 1996, thus exceeding statutory requirements.**

From the beginning of 1996 through July 2002, MAC spent about $162 million for home insulation, $33 million for school insulation, and $14 million to acquire properties located near the airport (see Figure 4.2).[30] Altogether, MAC's spending for sound insulation and property acquisition from the 1980s to present totals about $282 million—including $191 million for home insulation, $43 million for school insulation, and $48 million for property acquisition.[31]

In addition, MAC recommended in 1996 that spending for its noise abatement program should increase beyond $25.5 million per year, to accelerate program implementation.[32] We found that spending for MAC's sound insulation program

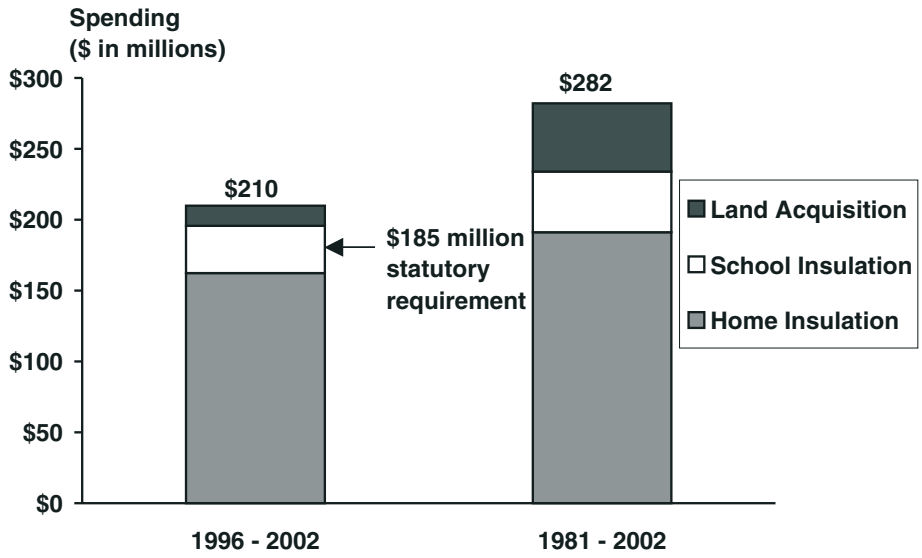
29 *Laws of Minnesota* (1996), ch. 464, art. 3, sec. 13.

30 *Laws of Minnesota* (1996), ch. 464, art. 3, sec. 13 also required MAC to insulate six schools in the 60 DNL contour (four in Minneapolis and two in Richfield) by the end of 2002. Their names were not specified in the law, so the cities identified their preferences for insulation. Of the six selected, five were completed by the end of 2002. Insulation of the sixth (in Minneapolis) is scheduled to begin in 2003.

31 MAC started its first school insulation project in 1981. It has insulated 17 schools over the past two decades.

32 MAC, *MSP Noise Mitigation Program* (Minneapolis, November 1996), 2.

Figure 4.2: Noise Mitigation Expenditures by MAC (Through July 2002)



SOURCE: Office of the Legislative Auditor analysis of MAC data.

MAC's spending levels for noise mitigation since 1996 met legislative requirements.

alone surpassed this goal over four consecutive years, starting in 1998.[33] MAC spent about $33 million in 2001 for sound insulation, but it significantly curtailed the program in the months following the September 11, 2001 terrorist attacks.

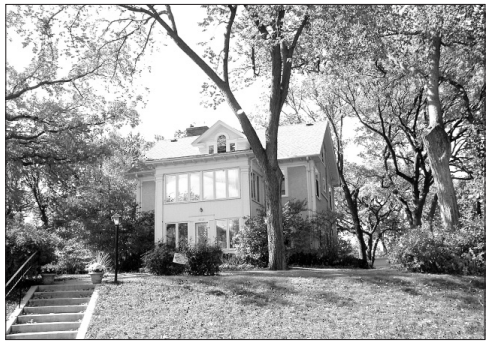
Finally, we examined how MAC's noise mitigation spending levels compare with the long-term plan it negotiated with the airlines in 1999. The operating agreement between MAC and the airlines established budgets for a variety of capital expenditures, including noise mitigation. The agreement estimated that MAC would spend $477 million (in inflation-adjusted dollars) between 1998 and 2010 on noise mitigation, including $136 million on sound insulation in the 65+ DNL area. We found that:

- **The projected cost of MAC's sound insulation program for homes with noise levels exceeding 65 DNL is significantly higher than the amount budgeted for this purpose in the airline operating agreement, but it will be covered by a contingency amount established for the noise programs.**

MAC has projected that its 1998-2010 expenditures for 65+ DNL sound insulation will total $186 million, or about $50 million over the $136 million budget in the operating agreement. MAC officials told us that the expenditure increases were mostly due to unanticipated increases in the insulation cost per home—for instance, due to the larger homes that MAC began to insulate as the program

33 Using MAC data on sound insulation, we determined that MAC spent $26.4 million in 1998, $26.0 million in 1999, $35.5 million in 2000, and $33.2 million in 2001.

reached neighborhoods farther from the airport.[34] Figure 4.3 shows that MAC's average construction costs per home have increased significantly over the course of the program, reaching $47,449 in 2001.[35] The highest construction cost for insulating an individual home has been $125,438.[36]



MAC's sound insulation construction costs for these two homes exceeded $120,000 each.

MAC will have to manage its remaining noise mitigation work carefully to stay within its budget.

So far, MAC's spending for noise programs is within the overall budget established by the 1999 airline agreement—mainly because the agreement contains a contingency amount of $50 million for noise-related programs ($61.5 million in inflated dollars). However, due to higher-than-expected spending levels for the 65+ DNL program, MAC will have to manage the remaining noise mitigation work carefully between now and 2010 to fulfill its noise mitigation commitments in the 60-64 and 65+ DNL areas within the budget constraints of the airline operating agreement.

ACCURACY OF MAC'S 1996 NOISE PROJECTIONS

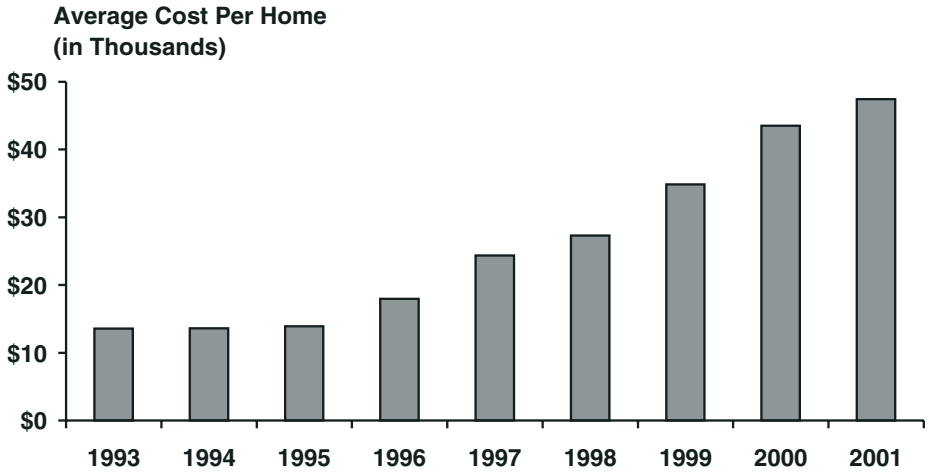
Airports' Part 150 submissions to the federal government must include a noise exposure map based on existing conditions and another map reflecting forecast conditions five years after the date of the submission. The forecast map must be "based on reasonable assumptions concerning future type and frequency of aircraft operations, number of nighttime operations, flight patterns, airport layout. . ., planned land use changes, and demographic changes in the surrounding

34 Arguably, MAC should have foreseen the increase in home size as the insulation program progressed. MAC staff said that several other factors contributed to escalating costs as the program progressed, including: (1) more homes with boiler heat, thus requiring the installation of ductwork to accommodate air conditioning, (2) more historic homes (although MAC records identified only 161 "historic" housing units among those that have been insulated), (3) indoor air testing, starting in 1997, and (4) increasing labor and material costs, partly due to the strong economy.

35 Average cost per home declined in the first part of 2002, based on very limited data. Among homes on which insulation bids were received in January through July 2002, there were only five homes for which 100 percent of costs had been paid as of July 2002. For these homes, the average insulation cost was about $26,000.

36 Construction costs do not include the costs of design work and program administration.

Figure 4.3: Residential Sound Insulation Program Average Cost Per Home, 1993 - 2001



NOTE: Based on date of bids received. Includes only those homes for which 100 percent of costs have been paid.

SOURCE: Office of the Legislative Auditor analysis of Metropolitan Airports Commission data.

MAC's average insulation cost per home increased to $47,449 in 2001.

areas."[37] Airports must certify that submitted maps are "true and complete."[38] The Federal Aviation Administration (FAA) reviews airports' Part 150 submissions and approves or disapproves them.

MAC's federally-approved noise program relies on projections of future noise levels.

MAC's federally-approved noise contours became the basis for a residential sound insulation program at Minneapolis-St. Paul International Airport that started in 1992. Homes that in 1992 were projected to have 1996 noise levels of 65 DNL and greater were eligible for MAC-financed modifications.

MAC's projected 1996 noise map is its most recent federally-approved map of projected noise. Thus, even today, eligibility for the sound insulation program relies on MAC's 1992 projection of the 1996 noise contours. Because the contours determine program eligibility, we examined how the noise levels *forecast* for 1996 compared with *actual* noise levels in 1996.[39] We found that:

- **MAC's forecasts of 1996 airport noise levels were considerably different from the actual levels of airport noise experienced by homes in 1996. For the most part, MAC underestimated the actual 1996 noise levels.**

37 14 *CFR* ch. 1, part 150.21 (2001).

38 14 *CFR* ch. 1, part 150.21 (2001).

39 The actual noise contour for 1996 was developed for the following document: Federal Aviation Administration, Great Lakes Region, Air Traffic Division, *Environmental Assessment for Revised Air Traffic Control Procedures Off of Runway 30L-30R* (Minneapolis, June 25, 1999). This "actual" contour map was developed by applying data on actual airport operations to the federal Integrated Noise Model—thus, estimating actual noise exposure levels.

For the most part, MAC's projections of noise for 1996 understated the actual noise levels.

For instance, Figure 4.4 compares the projected and actual DNL 65 noise contours for 1996. In most parts of the map, the actual 1996 noise contour extends farther from the airport than does the projected 1996 contour map. Thus, the actual 1996 contour covers more land area than the projected 1996 contour and reflects a higher-than-projected level of noise. For instance, the actual 1996 65+ DNL contour extends about one-half mile farther into south Minneapolis straight out from the end of the south parallel runway than does the comparable portion of the projected 1996 contour. In part of north Richfield, the actual 1996 noise contour exceeds the boundaries of the projected contour by more than a mile. Similarly, the actual noise contour extends from the parallel runways more than 3,000 feet farther into portions of Eagan and Mendota Heights than does the projected contour. In contrast, the projected noise contour in Bloomington extends well beyond the actual contour, indicating that actual noise in Bloomington was not as great in 1996 as MAC had projected.

We identified several factors that contributed significantly to the differences between the projected and actual 1996 noise contours.[40] First,

- **The airport had more arrivals and departures in 1996 than MAC had projected.**

Combined, arrivals and departures are commonly called "operations." To project the number of operations at Minneapolis-St. Paul International Airport for 1996, MAC relied on forecasts that had been developed in 1989 for the airport's long-term comprehensive plan. MAC projected a total of about 428,000 operations at the airport during 1996, which would have been a 10 percent increase over its estimated number of 1991 operations. As Figure 4.5 shows, however, the actual number of operations in 1996 was about 485,000—which was 25 percent higher than the 1991 baseline and 13 percent higher than MAC's projected number of 1996 operations. MAC staff told us that the projections seemed reasonable at the time the Part 150 report was developed. Northwest Airlines, which has hub operations at the Minneapolis-St. Paul Airport, had serious financial difficulties in the early 1990s, and its future was uncertain. Also, the economy came out of a recession in 1993, and few people predicted the strong economic boom that followed.[41] In any case, the larger-than-projected number of actual operations at the airport contributed to MAC's underestimation of airport noise.

A second reason for differences between projected and actual noise levels was that:

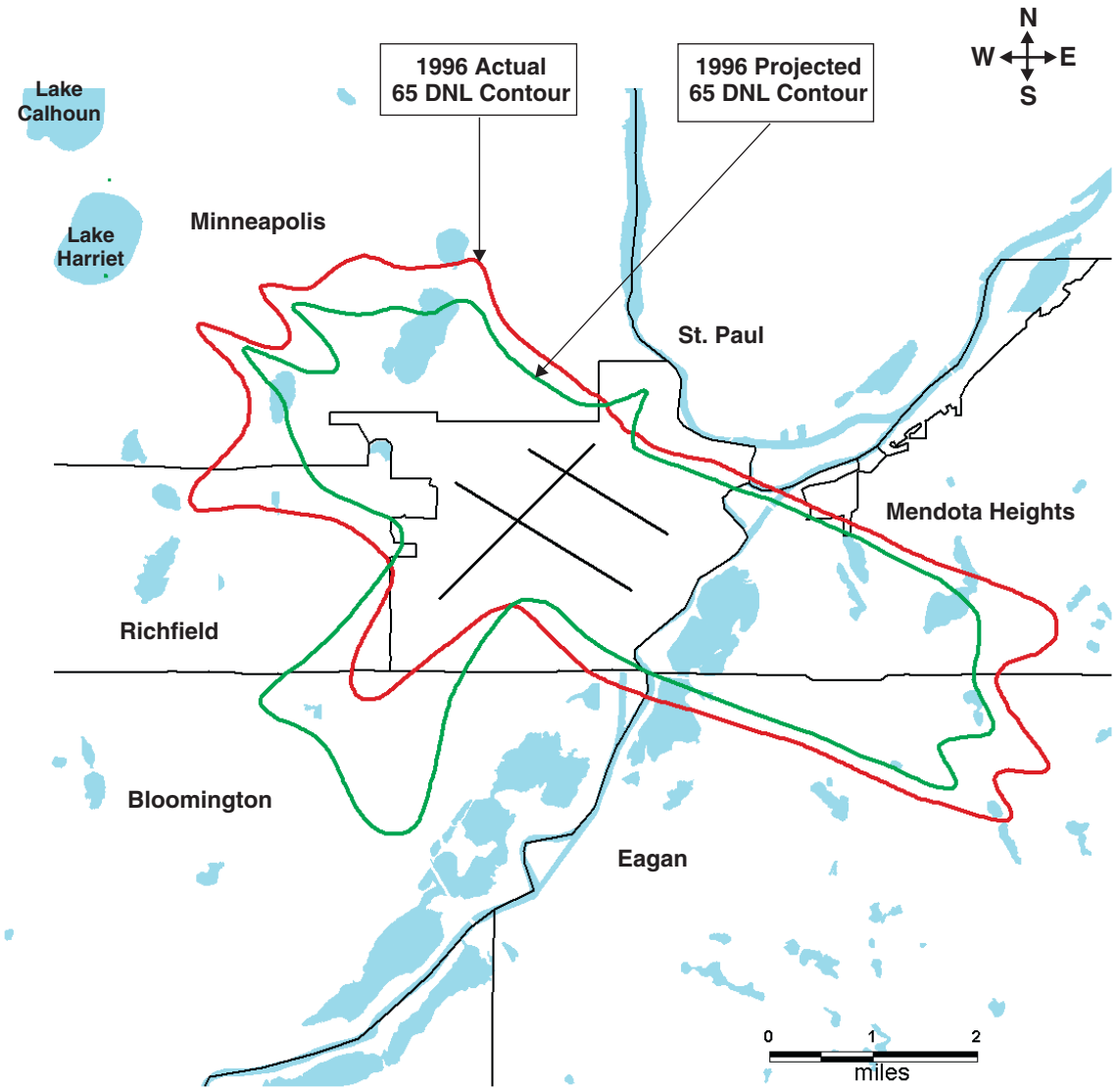
- **Aircraft meeting new, more restrictive noise standards comprised a smaller proportion of the fleet using the Minneapolis-St. Paul Airport in 1996 than MAC had anticipated.**

---

40 Other factors not discussed here could also have played a role. For instance, we were interested in comparing the projected and actual use of individual "flight tracks" from the various runways; however, MAC said that such data are not readily available for 1996.

41 As part of the dual track airport planning process, MAC developed "high" and "low" long-term forecasts of airport activity in 1993, and actual operations at the airport in subsequent years tracked much closer to the high estimate than the low estimate. MAC had not developed the high and low forecasts at the time it developed the noise exposure map in 1992 for the Part 150 report.

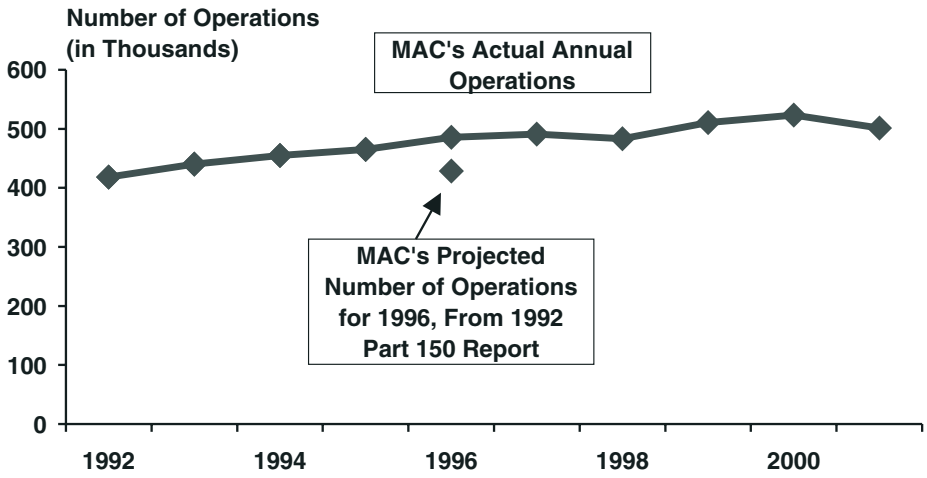
Figure 4.4: Comparison of Projected and Actual 1996 Noise Contours (65 DNL)



NOTE: The "actual" noise contour was developed using the federally-sanctioned Integrated Noise Model.

SOURCE: HNTB, *FAR Part 150 Study Update* (Minneapolis: Metropolitan Airports Commission, March 1992); Federal Aviation Administration, Great Lakes Region, Air Traffic Division, *Environmental Assessment for Revised Air Traffic Control Procedures Off of Runway 30L-30R* (Minneapolis, June 25, 1999).

Figure 4.5: Number of Operations at Minneapolis-St. Paul Airport (1992 - 2001 Actual and 1996 MAC Projection)



SOURCE: Metropolitan Airports Commission (1992-2001 actual data); HNTB, *Minneapolis-St. Paul International Airport, FAR Part 150 Study Update* (Minneapolis: Metropolitan Airports Commission, March 1992), D-8.

The airport had 13 percent more operations in 1996 than MAC had projected.

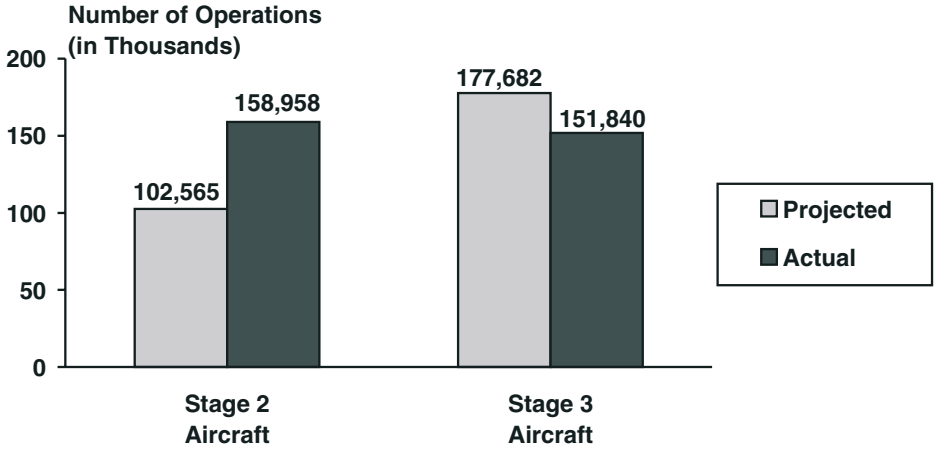
Earlier, we described how federal laws required airlines to change their aircraft from "Stage 2" to "Stage 3" standards by 2000. To meet the new standards, airlines had to either (1) acquire new planes built to meet Stage 3 standards (such as Airbus 320s and Boeing 757s), or (2) modify Stage 2 aircraft (such as Boeing 727s and DC-9s) to comply with the new standards. As shown in Figure 4.6, there were 55 percent more Stage 2 aircraft operations in 1996 than MAC had projected for that year. In addition, there were 15 percent fewer Stage 3 aircraft operations in 1996 than MAC had projected for that year. Or, stated in a different way, MAC projected that 63 percent of commercial aircraft over 75,000 pounds using Minneapolis-St. Paul Airport would meet Stage 3 standards in 1996—but, in fact, only 49 percent did. MAC staff told us that, at the time they developed the Part 150 report in 1992, they assumed that airlines would purchase new Stage 3 aircraft to comply with the new federal requirements. But Northwest Airlines delayed retirement of some of its older aircraft and even purchased *additional* Stage 2 aircraft for its fleet. These planes were eventually modified to comply with Stage 3 requirements, but this happened gradually in the years leading up to 2000. In addition, many of the modified planes were barely compliant with Stage 3 requirements, while new planes typically exceeded the Stage 3 requirements by a larger amount.

Third,

- **Aircraft used Runway 4-22 (sometimes called the "crosswind runway") far less in 1996 than MAC had anticipated, so other runways received more of the airport's traffic.**

Figure 4.6: Projected and Actual Number of Stage 2 and Stage 3 Operations at Minneapolis-St. Paul Airport, 1996

"Stage 2" aircraft—which were subject to less restrictive noise standards—accounted for more air traffic in 1996 than MAC had projected.



NOTE: The number of operations does not include general aviation aircraft, air carrier turboprop or piston aircraft, or military aircraft.

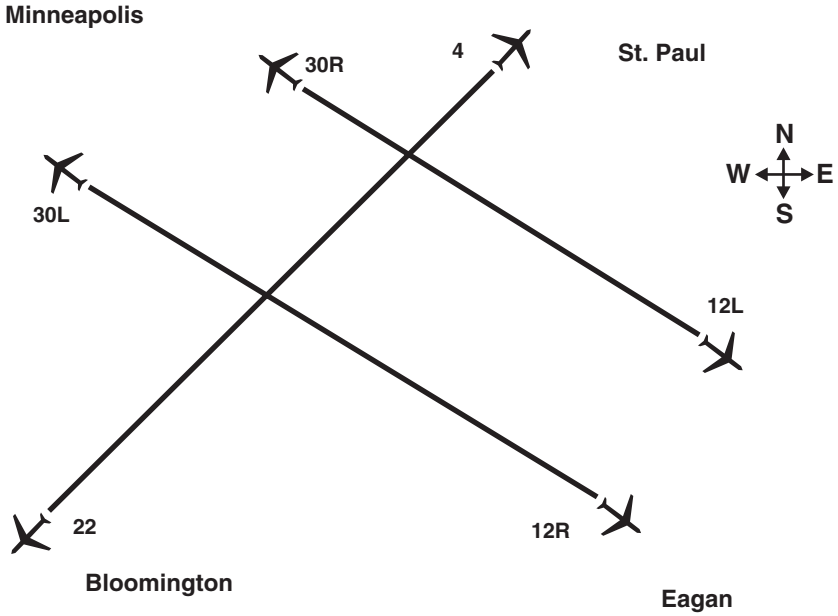
SOURCE: Metropolitan Airports Commission.

During the 1990s, Minneapolis-St. Paul International Airport had three runways, as shown in Figure 4.7. Two parallel runways ("12L-30R" and "12R-30L") face the northwest (toward south Minneapolis) and southeast (toward Eagan). A third runway (called "4-22") crosses the parallel runways and faces the southwest (toward Richfield and Bloomington) and northeast (toward Minnehaha Falls in Minneapolis and the Highland Park neighborhood in St. Paul).

In the early 1990s, MAC planned to extend Runway 4-22 so that larger planes could use it more often. At that time, MAC projected for 1996 that 23 percent of daytime departures and 6 percent of daytime arrivals would occur on this runway (see Table 4.3), mainly over Richfield and Bloomington. In fact, however, less than 3 percent of daytime departures and less than 1 percent of daytime arrivals occurred on Runway 4-22 in 1996. Two important factors contributed to this change. First, the extension of Runway 4-22 was delayed several years due to legal challenges by the city of Richfield. Second, as the overall level of operations at the airport grew faster than expected, it became necessary to accommodate more flights by using the airport's parallel runways (which allowed for simultaneous take-offs), rather than using a runway that crossed the other two.

Because Runway 4-22 was used less than expected, the parallel runways were used more than expected. The most important impacts were that Bloomington experienced less air traffic than had been projected, and the communities at both ends of the parallel runways experienced more. For instance, 47 percent of the airport's daytime departures took off over the northwest ends of the parallel runways (toward south Minneapolis) in 1996, compared with MAC's projection of 25 percent.

Figure 4.7: Minneapolis-St. Paul International Airport Runways



NOTE: The planes pictured next to the runway numbers indicate the direction faced by planes using the respective runways. For instance, Runway "12L" is used by planes that face 120 degrees (to the southeast), whether they are departing or landing. The parallel runways are labeled "L" or "R"—that is, the left or right runway for a plane facing a given direction.

SOURCE: Metropolitan Airports Commission.

Bloomington experienced less noise than expected, due to limited use of the "crosswind runway."

The 1996 projections are important even today because they affect eligibility for MAC's sound insulation program. Specifically, MAC's program to insulate homes in the 65+ DNL area has been—and continues to be—based on the *projected* 1996 noise contour maps. We recognize that that there are limitations in the ability of any agency to accurately project future noise levels, and there were many uncertainties in 1992 when MAC developed its projections. Still, because the actual 1996 noise contours were larger than the projected noise contours, we think it is noteworthy that:

- **Some homes that would have been eligible for insulation if MAC had projected 1996 noise levels more accurately are not eligible for the existing program.**

Federal regulations require airports to submit revised noise exposure maps if changes in airport operations would create any "substantial, new noncompatible use" in areas beyond what was previously forecast.[42] Federal regulations define areas with DNL levels of 65 and greater as incompatible land uses for residential purposes, although communities may determine whether homes may be allowed in the 65-75 DNL area. Airports are supposed to submit revised noise maps if

42 14 *CFR* ch. 1, §150.21 (d) (2001).

Table 4.3: Projected and Actual Percentage of Flights Using Various Runways at Minneapolis–St. Paul Airport, 1996

Departures

Runway	Main Area affected	1996 Daytime Departures Projected	1996 Daytime Departures Actual	1996 Nighttime Departures Projected	1996 Nighttime Departures Actual
12L	Mendota Heights	28.5%	26.5%	23.4%	21.1%
12R	and Eagan	24.2	24.3	34.8	40.8
30L	South	10.1	22.9	10.4	20.7
30R	Minneapolis	14.5	23.7	11.3	11.3
4	Minneapolis-St. Paul border	1.6	0.2	1.2	0.9
22	Bloomington and Richfield	21.1	2.5	18.9	5.1
Total		100.0%	100.0%	100.0%	100.0%
N		170,966	222,322	28,032	20,440

Arrivals

Runway	Main Area Affected	1996 Daytime Arrivals Projected	1996 Daytime Arrivals Actual	1996 Nighttime Arrivals Projected	1996 Nighttime Arrivals Actual
12L	South	22.4%	24.8%	15.8%	15.6%
12R	Minneapolis	24.2	23.5	19.1	18.5
30L	Mendota Heights	24.6	25.0	39.9	40.2
30R	and Eagan	22.8	25.9	18.3	23.8
4	Bloomington and Richfield	0.8	0.5	2.6	1.7
22	Minneapolis-St. Paul border	5.2	0.2	4.3	0.3
Total		100.0%	100.0%	100.0%	100.0%
N		178,047	217,102	20,951	25,623

SOURCE: Metropolitan Airports Commission.

Federal regulations require updates of noise maps if noise levels increase significantly.

there is an increase of at least 1.5 DNL that (1) increases the incompatibility of a presently incompatible area, or (2) causes a previously compatible land use to become incompatible.[43] Based on a review of data from the 24 noise monitors that MAC operated in the mid-1990s, we found that there were at least two monitoring sites where (1) the actual 1996 noise level was at least 1.5 DNL higher than the projected 1996 noise levels, and (2) the actual 1996 noise level was higher than 65 DNL, while the projected 1996 noise level was less than 65 DNL.[44]

43 14 *CFR* ch. 1, §150.21 (d) (2001).

44 A monitor near the intersection of Oakland and 49th streets in Minneapolis had a projected 1996 noise level below 65 DNL, but the actual DNL level during 1996 was 66.6 (average of 12 monthly DNL levels). A monitor near the intersection of Wentworth & 64th streets in Richfield had a projected 1996 noise level below 65 DNL, but the actual DNL level during 1996 was 66.9. There may have been other sites with increases of more than 1.5 DNL over projected levels, but MAC was unable to provide us with projected 1996 DNL readings for individual monitoring stations. We used MAC's projected 1996 noise contour map to determine sites that were projected to be above or below the 65 DNL threshold.

Federal officials think that MAC was justified in delaying noise map revisions until key issues about the airport's future were resolved.

From 1992 until late 2001, MAC submitted no revisions of its 1996 noise exposure map to the federal government. We talked with Federal Aviation Administration (FAA) officials about whether MAC was obligated by federal regulations to submit a revision, in light of the higher-than-expected noise levels that occurred in the mid-1990s. Local FAA officials told us that, in their opinion, MAC was justified in waiting to submit updated noise maps until key issues were resolved regarding Minneapolis-St. Paul International Airport—such as decisions regarding whether to build a new airport, and whether to construct a new runway at the existing airport. The Legislature decided in 1996 not to build a new airport, and the environmental impact statement for the dual track planning process (including an assessment of the impact of a new runway) was completed in late 1998.[45] In early 1999, MAC started to develop a new Part 150 noise mitigation proposal, and this process culminated in a submission to the federal government in November 2001.

MAC did not submit revisions to its Part 150 report during the mid-1990s, but it did make some changes to eligibility for noise mitigation in Bloomington. Because there was uncertainty about when (and whether) the Runway 4-22 extension would occur, MAC voted in 1993 to defer noise mitigation projects for more than 1,000 homes in Bloomington.[46] MAC's Part 150 report projected that these homes would have 1996 noise levels exceeding 65 DNL due to increased use of the extended Runway 4-22. The runway was eventually extended, but traffic on Runway 4-22 did not increase significantly and the deferred noise mitigation projects were not completed. In contrast, other parts of the metropolitan area received significantly more air traffic as a result of the higher-than-expected use of the parallel runways. MAC proposed no changes in sound insulation eligibility at either end of the parallel runways, although these areas had more homes than previously expected with noise levels above 65 DNL in the mid-1990s.

But even if MAC had initiated a revision of its Part 150 noise contours prior to 1999,

- **A revised noise forecast in the mid- to late-1990s might have resulted in reduced rather than expanded program eligibility for MAC's sound insulation program, due to changes in aircraft noise that were mandated by federal law.**

The Part 150 noise mitigation program is based on estimates of noise levels at a future time. Federal officials told us that if MAC had decided to revise its noise contour maps in 1995-98, they would likely have expected MAC to estimate noise levels for five years *from the date of the revision*. However, a new five-year forecast developed during this time period could have resulted in a smaller 65+ DNL contour than the one MAC developed in 1992 because of the federally-required phase-out of "Stage 2" planes by 2000. Thus, a Part 150

45 MAC submitted the environmental impact statement to the federal government in May 1998. It was approved by the Federal Aviation Administration in September 1998 and certified as adequate by the Minnesota Environmental Quality Board in December 1998.

46 In 1993, some MAC commissioners noted that (1) many Bloomington residents opposed the runway extension, and (2) the runway extension might not be built. They suggested that other areas in the 65+ DNL area should be higher priorities for funding. Consequently, MAC deferred sound insulation for about 1,000 homes and land acquisition for 75 homes.

revision could have caused some homes that were projected to be within the 1996 65+ DNL contour to lose eligibility for insulation. Meanwhile, homes that had *actual* 1996 noise exceeding 65 DNL (but were ineligible for funding under the 1996 projected contours) would not necessarily have had *projected* noise levels above 65 DNL under the revised contours. Overall, it is unclear whether a revision of the Part 150 contour maps would have remedied the concerns of homeowners who thought that forecasting inaccuracies caused them to be omitted from the sound insulation program.[47] On the other hand, we think that the 15-member Metropolitan Airports Commission should have discussed in the mid-1990s the accuracy of past noise forecasts and the implications of higher-than-expected noise levels; however, MAC staff did not bring these issues to the commission's attention.[48]

It is unclear whether revised forecasts would have remedied the concerns of homeowners who thought they were wrongly omitted from the sound insulation program.

In the 65 DNL area, MAC has reduced home noise by installing windows, doors, air conditioning, and insulation.

As we discuss later in this chapter, the airport's overall noise levels have declined since 1996. Although the number of airport operations grew after 1996 (see Figure 4.5), the types of planes using the airport have changed significantly. Stage 2 planes were phased out by 2000. In early 2001, Northwest Airlines announced plans to purchase 52 new planes, and various airlines announced plans to phase out older aircraft (such as DC-9s and DC-10s) in favor of newer, more cost-effective planes. These pre-September 2001 changes were forecast to reduce the number of operations by "hushkit"-modified planes by 10,000 annually at Minneapolis-St. Paul Airport, and such planes were often among the noisier planes in the fleet. Fleet changes continued to occur after the September 11, 2001 terrorist attacks, leading MAC to withdraw in May 2002 its November 2001 Part 150 submission to the FAA. MAC staff plan to update estimates of future noise levels and submit a revised Part 150 report to FAA later in 2003. Staff anticipate that the projected 2007 noise contours will be considerably smaller than those that MAC previously projected for 1996.

---

47 Parties that feel aggrieved by the actions of MAC or the FAA may seek redress through administrative appeals or legal actions. We offer no opinion about the legality of previous actions by MAC or the FAA.

48 MAC staff told us that initiating a Part 150 revision in the late stages of the dual track airport planning process might have been viewed by some people as an attempt to influence the outcome of that process. In addition, MAC staff said that they did not see solid data before 1996 supporting a need for changes in the earlier noise projections.

COMPARISON OF MAC'S NOISE PROGRAM WITH OTHER AIRPORTS

Airports have varying needs for noise mitigation, depending on their location. For instance, some newer airports (such as Denver International Airport) were constructed at locations away from existing development—thus, reducing the need for noise mitigation. In contrast, the Minneapolis-St. Paul International Airport is located in a developed urban area, with extensive residential development in some of the airport's main flight paths.

Since 1992, the Metropolitan Airports Commission has administered a sound insulation program within the 65+ DNL contour. Through July 2002, MAC had completed work or received bids on more than 6,400 single-family homes and 200 duplexes.[49] As shown in Table 4.4, most of the insulated homes have been in Minneapolis. In 2002, MAC estimated that there were about 1,100 homes in the 65+ DNL area still scheduled to undergo insulation, at an estimated cost of $42 million. MAC estimates that it will complete residential sound insulation in the 65+ DNL area during 2004, and it will then begin insulating homes in the 60-64 DNL area.

Most of the homes insulated by MAC are in Minneapolis.

Table 4.4: Location of Homes That Have Been Sound-Insulated by MAC (Through July 2002)

City	Housing Units	Percent
Minneapolis	5,808	84.9%
Richfield	623	9.1
Eagan	188	2.7
Bloomington	128	1.9
Mendota Heights	93	1.4
Total	6,840	100.0%

SOURCE: Office of the Legislative Auditor analysis of MAC data.

To determine how MAC's noise mitigation program compares with those at other U.S. airports, we contacted noise officials at 20 large airports (mostly "large hub" airports).[50] One airport with an extensive noise mitigation program (Atlanta) did not respond to repeated requests for information, but we are not aware of other large noise mitigation programs that were not represented in our airport survey.[51]

49 MAC's noise mitigation database had records of 6,431 single-family homes and 203 duplexes insulated between the beginning of 1993 and July 2002. MAC's database does not contain information on some additional homes that were insulated in 1992. MAC estimates that the total number of single-family homes insulated from 1992 through the end of 2002 was about 6,900.

50 Large hub airports are those with at least a 1 percent share of total passenger enplanements in the country. We contacted the large hub airports with the most operations, plus two smaller airports (Cleveland and Chicago-Midway) that we knew had undertaken significant noise mitigation programs.

51 A 2001 MAC memorandum indicated that Atlanta had spent $175 million on residential sound insulation. (Roy Fuhrmann, Manager, Aviation Noise and Satellite Programs, memorandum to Nigel Finney, Deputy Executive Director, Planning and Development, *Comparison of MSP's Sound Insulation Program*, June 1, 2001).

Eleven of the 20 airports we contacted do not participate in the federal Part 150 noise mitigation program, although several of these airports operate noise mitigation programs with their own funds.

We found that:

- **The Minneapolis-St. Paul International Airport has one of the most extensive noise mitigation programs among U.S. airports—particularly for single-family home insulation.**

As shown in Table 4.5, the Minneapolis-St. Paul Airport's cumulative expenditures for single-family home insulation (about $190 million) rank near the top among U.S. airports. Only two airports (San Francisco and Seattle) reported that they have insulated more homes than the Minneapolis-St. Paul Airport. In addition, the Minneapolis-St. Paul Airport's home insulation program offers as many noise mitigation treatments as any airport we contacted. While airports with home insulation programs typically replace windows and doors, the Minneapolis-St. Paul Airport's program also includes components that some airports do not offer—such as installation of air conditioning, attic and wall

The extent of noise insulation by major airports varies considerably.

Table 4.5: Sound Insulation of Single-Family Homes, Selected Airports

Airport	Number of Single-Family Homes Insulated To Date	Total Single-Family Home Insulation Costs to Date (in Millions)
Seattle	8,700	$204.0
Minneapolis-St. Paul[a]	**6,431**	**190.2**
San Francisco	>10,000	170.0
Chicago - O'Hare	3,934	129.8
Cleveland	1,900	59.9
Los Angeles[b]	2,179	45.8
Chicago - Midway	1,170	38.0
Detroit	640	22.1
Phoenix	720	21.6
Boston	1,750	21.0
St. Louis	>100	4.6
Dallas/Ft. Worth	0	0.0
Denver	0	0.0
Houston	0	0.0
Las Vegas	0	0.0
Miami	0	0.0
Newark	0	0.0
New York - JFK	0	0.0
New York - LaGuardia	0	0.0
Orlando	0	0.0
Philadelphia	0	0.0

[a]Does not include $946,894 for multi-family home insulation. Includes homes for which bids were received from 1993 through July 2002.

[b]Data for Los Angeles represent the sum of four different program estimates and airport staff cautioned that they should be viewed as rough estimates.

SOURCE: Office of the Legislative Auditor phone survey, August-November 2002; Minneapolis-St. Paul Airport information from Metropolitan Airports Commission.

insulation, and ventilation improvements.[52] Finally, as discussed earlier in this chapter, MAC has proposed a noise mitigation program for the 60-64 DNL area that would be more extensive than any such program implemented by a major airport in the U.S.

The Minneapolis-St. Paul Airport's noise program has relied mostly on building insulation, while some other airports have relied more on property acquisition.

In contrast to the Minneapolis-St. Paul Airport, some airports have focused more of their noise mitigation efforts on activities other than sound insulation of single-family homes. For instance, the city of Chicago has spent $259 million on school insulation in the areas around O'Hare and Midway airports. Similarly, the sound insulation program of the three major airports operated by the New York-New Jersey Port Authority focuses exclusively on insulation of schools, not residences.[53] In addition, some airports have spent considerable amounts on land acquisition. For example, officials at the St. Louis airport told us they have spent $200 million to acquire 2,000 homes. Other airports with large land acquisition costs include Cleveland ($175 million), Dallas-Fort Worth ($86 million), and Los Angeles ($85 million). In contrast, MAC has spent $48 million to acquire about 430 housing units and several other properties.

AIRPORT NOISE TRENDS

The adverse effects of airport noise depend on (1) the levels of ambient noise, and (2) steps that have been taken to *minimize the effect* of airport noise (for instance, programs that insulate or acquire homes). Ambient noise levels depend considerably on the types and number of aircraft using an airport, which are largely beyond MAC's direct control. Still, we think it is instructive to consider whether the underlying noise problem at Minneapolis-St. Paul International Airport has grown better or worse in recent years.

We assessed airport noise levels using two main sources of information. First, we compared models of existing airport noise at the Minneapolis-St. Paul International Airport for 1996 and 2000. Using a federally-sanctioned computer program called the Integrated Noise Model plus data on actual airport operations, MAC and its consultants have estimated existing ground-level noise levels for a variety of sites surrounding the airport. MAC is required to use this model to estimate current and future noise when it submits Part 150 reports to the federal government. Second, MAC has operated monitors since 1993 to measure actual noise levels, and we examined the data collected by these monitors.[54] Presently, this system has 39 remote monitoring sensors at ground locations in the vicinity of airport flight paths. We found that:

- **In general, noise levels at sites near the Minneapolis-St. Paul Airport have declined since the mid-1990s.**

---

52 The other airports with noise programs that included all of these components were Los Angeles, Chicago-O'Hare, and Chicago-Midway.

53 The Port Authority has spent $40 million on school insulation near LaGuardia, Kennedy, and Newark airports.

54 This system is called the Airport Noise and Operations Monitoring System, or ANOMS.

Federal models used to estimate airport noise suggest that the size of the areas subject to significant noise decreased from 1996 to 2000.

Figure 4.8 shows models of actual noise levels around the airport in 1996 and 2000, based on the Integrated Noise Model. 1996 is the year which was the basis for MAC's most recent *federally-approved* Part 150 map of projected noise levels, and it was the year the Legislature decided to keep the airport at its present location. The 2000 noise exposure map is the most recent map of modeled noise exposure that MAC has developed. (This map was developed for the Part 150 report that MAC submitted to the federal government in 2001 but subsequently withdrew.) In Figure 4.8, most parts of the 65 DNL contour of actual noise levels for 2000 are inside the boundaries of the 65 DNL contour of actual noise levels for 1996—suggesting that there has been a reduction in noise.[55] The main place where the DNL 65 contour grew beyond its 1996 boundaries was at its westernmost portion, in south Minneapolis and Richfield.

In addition, we examined trends in noise measured by MAC's remote monitoring sensors. For each of the 24 noise monitors that have operated continuously since 1995, Table 4.6 shows the average monthly DNL noise level during the first three months of the year for 1995, 1996, 2001, and 2002.[56] Although the number of arrivals and departures have increased at the airport since 1995, MAC's noise monitors have generally measured declines in noise over this period. For instance, the table shows that all 24 monitors measured lower average DNL levels in 2001 and 2002 than they did in comparable months during 1995 and 1996.

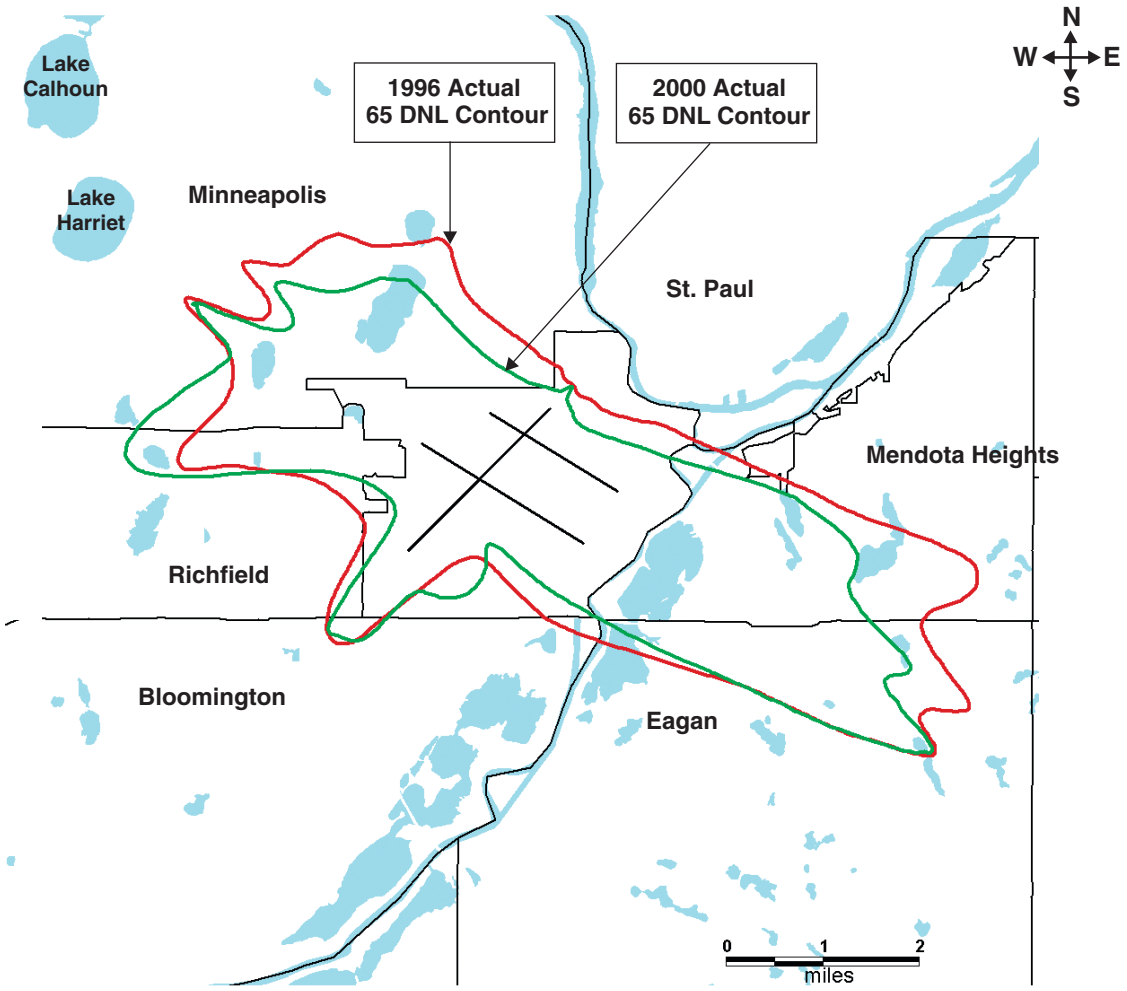
DNL is computed by averaging noise levels throughout the day, and some people have expressed concern that this measure does not adequately convey the disturbance caused by single, peak-level noise events. We examined annual trends since 1996 in the number of high-decibel noise events at two noise monitoring stations that are in the flight path of many arriving and departing planes: one in south Minneapolis (at 27th Avenue and 57th Street), and one in Mendota Heights (located at the end of Kenndon Avenue). Examples of the trends include the following:

- **Departure events exceeding 100 decibels**: At the south Minneapolis monitoring site, the number of departure-related noise events exceeding 100 decibels declined from 4,494 in 1996 to 1,379 in 2000, 995 in 2001, and 378 during the first eight months of 2002. At the Mendota Heights monitoring site, the number of such events declined from 538 in 1996 to 6 in 2000 and 6 in 2001.

55 The federal Integrated Noise Model was updated between 1996 and 2000—in particular, to account for humidity. For MAC's projected 2005 contour, this change resulted in a 65 DNL contour that was 13 percent larger than it would have been if the previous version of the model had been used. If the 1996 contour shown in Figure 4.8 had been estimated using the updated version of the noise model, there would have been more pronounced reductions in the DNL 65 noise contour from 1996 to 2000 than are shown in this map.

56 We selected January through March because (1) the data for these months were relatively complete (there are some other months for which MAC is missing monitoring data in some of the years we reviewed), (2) the monitoring stations did not appear to have unusually high or low noise readings during these months, compared with other nearby months, and (3) we avoided September through December to avoid comparisons involving the months immediately following the September 11, 2001 attacks.

Figure 4.8: Comparison of Actual 1996 and Actual 2000 Noise Contours (65 DNL)



NOTE: "Actual" noise contours were developed using the federally-sanctioned Integrated Noise Model.

SOURCE: FAA, *Revised Air Traffic Control Procedures Off of Runway 30L-30R* (Minneapolis, June 25, 1999); HNTB, *14 CFR Part 150 Update* (Minneapolis: MAC, November 2001).

- **Departure events exceeding 90 decibels**: At the south Minneapolis monitoring site, the number of departure-related noise events exceeding 90 decibels declined from 18,156 in 1996 to 12,757 in 2000 and 11,203 in 2001. At the Mendota Heights site, the accuracy of the data from the latter months of 1996 appear to be questionable, so we used 1995 as a comparison year. The number of such events went from 6,632 in 1995 (based on only 10 months of data) to 6,661 in 2000 and 5,711 in 2001.

Table 4.6: Measured Noise Levels at MAC Monitoring Stations, Selected Time Periods

Remote Monitoring Station Number	Location	Average January-March DNL Levels for: 1995	1996	2001	2002
1	Minneapolis	61.0	61.1	57.8	57.3
2	Minneapolis	61.4	60.7	59.3	58.6
3	Minneapolis	65.8	65.5	63.9	63.6
4	Minneapolis	66.1	66.1	63.0	63.1
5	Minneapolis	73.4	75.4	71.2	72.4
6	Minneapolis	77.5	77.4	72.4	71.8
7	Richfield	66.9	68.6	65.9	65.8
8	Minneapolis	63.8	64.2	62.4	62.1
9	St. Paul	56.1	54.0	46.6	46.4
10	St. Paul	59.7	60.9	49.4	52.3
11	St. Paul	54.3	54.4	44.5	48.6
12	St. Paul	57.2	60.5	43.2	43.5
13	Mendota Heights	61.4	61.1	56.2	55.2
14	Eagan	65.0	67.4	64.7	63.9
15	Mendota Heights	64.8	65.1	59.3	58.3
16	Eagan	71.2	70.8	68.8	67.8
17	Bloomington	62.5	60.7	52.7	53.1
18	Richfield	69.4	67.3	56.7	55.8
19	Bloomington	66.9	64.7	52.2	48.4
20	Richfield	62.7	59.0	52.7	52.9
21	Inver Grove Heights	58.8	58.8	52.5	51.8
22	Inver Grove Heights	62.5	61.2	57.1	58.1
23	Mendota Heights	71.7	71.7	66.2	64.3
24	Eagan	66.1	66.2	62.1	62.4

SOURCE: Office of the Legislative Auditor analysis of data from MAC's monthly technical advisor's reports.

MAC's noise monitors recorded lower noise levels in 2001-02 than in earlier years.

In addition, we examined trends in arrivals and departures during nighttime hours.[57] People living near airports have expressed particular concerns about sleep disruptions due to nighttime flights. Figure 4.9 shows the number of operations at Minneapolis-St. Paul Airport between 11:00 p.m. and 6:00 a.m. since 1995, plus the number of 10:30 to 11:00 p.m. flights since July 1999 (when MAC began to separately track the number of flights in this time period).[58] The number of 11:00 p.m. to 6:00 a.m. operations appear to have increased during the late 1990s and then declined to a fairly stable 1,000 to 1,400 night flights per month—until September 2001, when they declined significantly. Northwest Airlines eliminated its last daily "bank" of evening flights at the airport following the terrorist attacks that month.[59] The number of nighttime operations increased during 2002 but remained somewhat below pre-September 2001 levels.

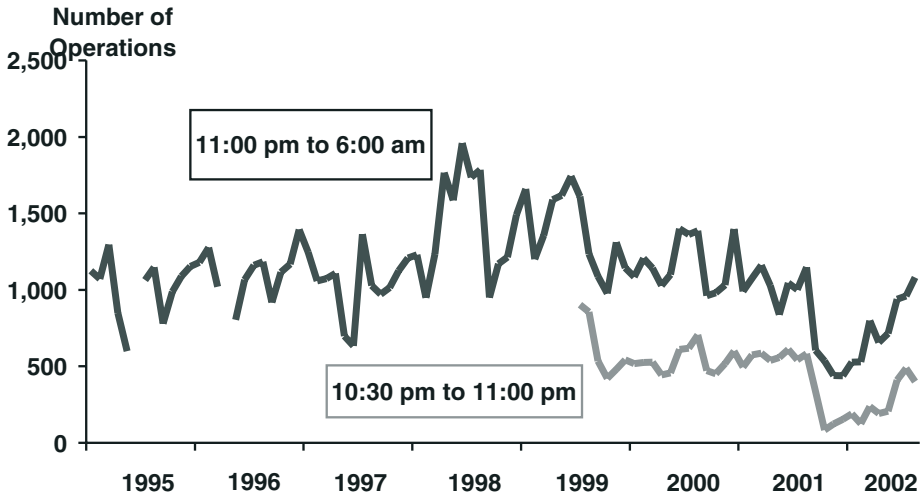
57 In recent years, MAC has produced monthly information on the number of nighttime flights—defined as 10:30 p.m. to 6:00 a.m since 1998, and 11:00 p.m. to 6:00 am before then.

58 For January 1998 to June 1999, MAC produced only aggregate data on the number of nighttime flights from 10:30 p.m. to 6:00 a.m. For this period, we estimated the number of 11:00 p.m. to 6:00 a.m. flights by assuming that 32 percent of nighttime flights occurred during the 10:30 p.m. to 11:00 p.m. period. (We adopted the 32 percent assumption based on a review of the percentage of flights occurring during this period from July 1999 to June 2000.)

59 Airlines typically cluster arriving and departing flights at their hub airports at various times during the day, to facilitate passengers trying to make connecting flights. These clusters are called banks of flights.

Figure 4.9: Number of Nighttime Operations at Minneapolis-St.Paul Airport, 1995 - 2002

The number of nighttime operations peaked in the late 1990s.



NOTE: Data are shown for January 1995 through August 2002; data were missing for June 1995 and April 1996. Data for 10:30-11:00 p.m. were not separately reported before July 1999.

SOURCE: Metropolitan Airports Commission.

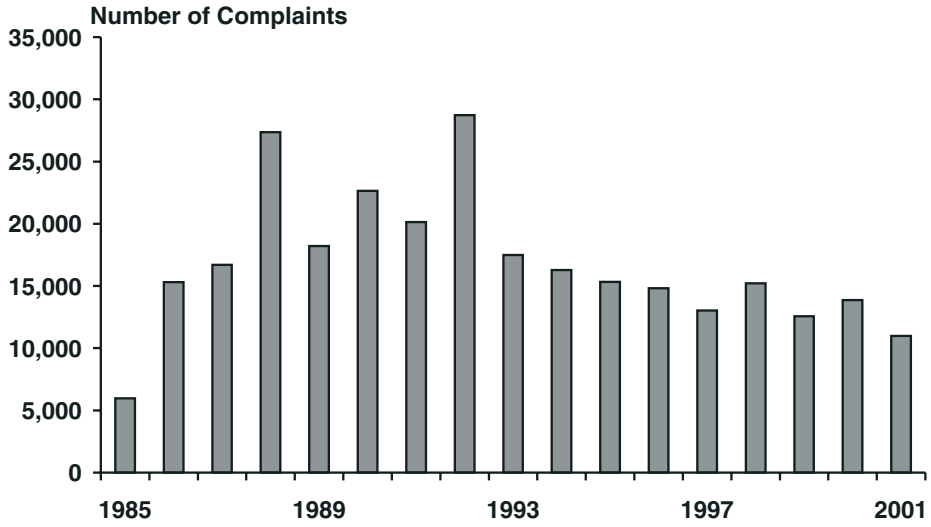
Finally, Figure 4.10 shows that noise-related complaints regarding Minneapolis-St. Paul International Airport peaked in 1992, with nearly 29,000 complaints that year. Since that time, noise complaints have declined—to 13,864 complaints in 2000 and 10,995 complaints in 2001. While this trend might reflect lower noise levels, it is also possible that residents near the airport have grown more reluctant to register complaints.

CHANGES IN NOISE MAPS, 2000-01

Early in our study, legislators raised questions about changes that MAC made in the airport's maps during development of a "Part 150" noise mitigation plan in 2000 and 2001. Specifically, they wondered why the noise contours submitted to the federal government in the final November 2001 Part 150 report were different from the contours that were presented in the November 2000 draft Part 150 report and discussed in public hearings during 2001. As we noted in Chapter 4, MAC eventually withdrew the final report it had submitted to the federal government so that it could revise the noise estimates, particularly to reflect recent changes in the airport's fleet mix.

Figure 4.11 shows a portion of the DNL 60 and 65 noise contour maps (projected for 2005) that appeared in the draft and final Part 150 reports. Although the differences between the draft and final contours appear to be relatively small, the final version of the 2005 60 DNL contour had 13 percent less non-airport land and about 3,000 fewer dwellings than the draft version. If MAC had decided to use the 2005 contour maps to determine eligibility for sound insulation, thousands of

Figure 4.10: Noise Complaints at Minneapolis-St. Paul Airport, 1985 - 2001



SOURCE: Metropolitan Airports Commission.

residents whose homes appeared to be eligible in the draft version would have found themselves ineligible in the final version. We found that:

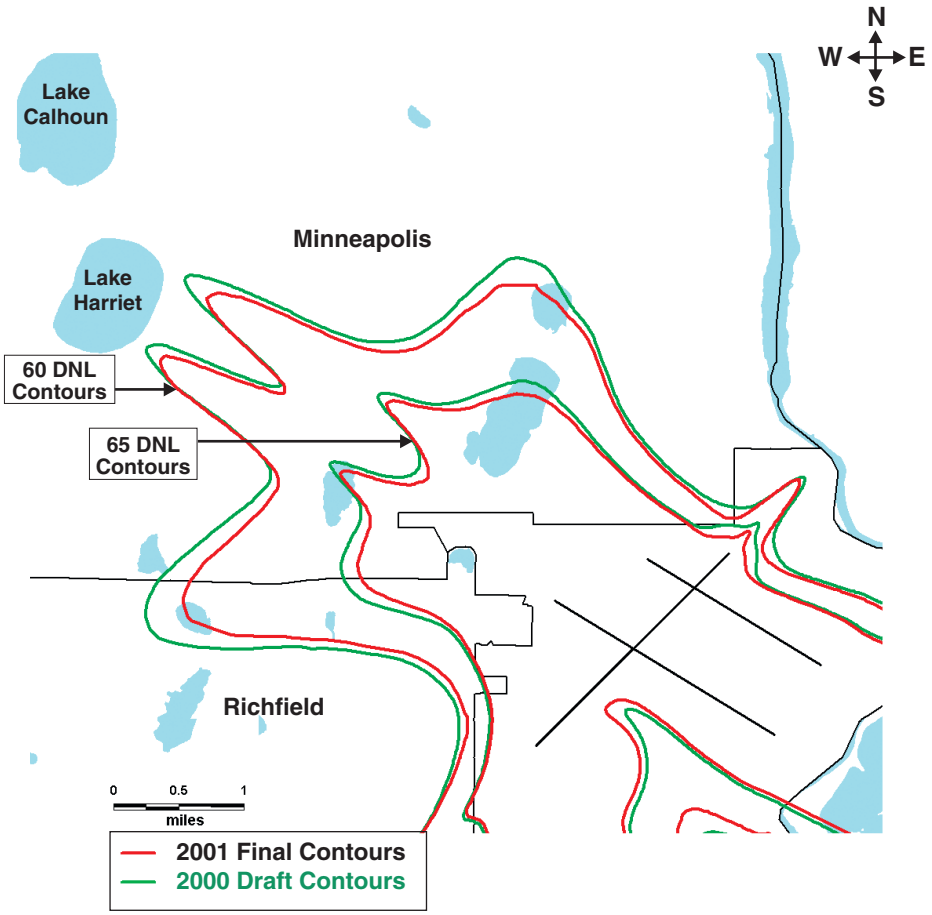
- **There were justifiable reasons that MAC changed the draft noise contours prior to publication of the final contours in 2001, but MAC could have done more to inform the public about these changes.**

MAC made reasonable adjustments to its noise maps but did not communicate these changes adequately.

The contours changed because of reasonable adjustments that MAC made to its assumptions about (1) aircraft flight patterns, and (2) fleet mix. During public hearings in 2001, some participants questioned why MAC's draft contours were based on the assumption that planes followed a single "arrival track" as they approached each of the Minneapolis-St. Paul Airport's runways. MAC agreed that planes' runway approaches can vary, and it subsequently revised its noise model to incorporate multiple arrival tracks (with estimates of the extent to which they would actually be used). The second reason that the contours changed was that the Metropolitan Airports Commission directed MAC staff in August 2001 to update the noise contours to reflect recent and expected changes in the mix of planes using the airport. For instance, MAC estimated that there would be 10,000 fewer arrivals and departures at the airport in 2005 that involved planes modified with "hushkits," based on fleet-related announcements made by several airlines subsequent to MAC's November 2000 issuance of the draft Part 150 report.

In our view, these adjustments reflected reasonable attempts by MAC to ensure that the projected noise contours were as accurate as possible prior to final publication. Also, we think that MAC's final version of the Part 150 report

Figure 4.11: Comparison of Projected 2005 Noise Contours (2000 Draft and 2001 Final; 60 and 65 DNL)



SOURCES: HNTB, *14 CFR Part 150 Update Draft Report* (Minneapolis: MAC, November 2000); and HNTB, *14 CFR Part 150 Update* (Minneapolis: MAC, November 2001).

adequately discusses these changes.[60] Nevertheless, we also think that MAC should have done a better job of (1) alerting the public that the draft noise contours might change, and (2) discussing the implications of the contour changes prior to publication of the final report.[61] The November 2000 draft report did not directly state that the noise exposure maps might be subject to revision, although the entire report was labeled as a draft. In addition, MAC did not have a functioning advisory group on noise issues during the months when it was finalizing the Part 150 report. Airline representatives withdrew from the

60 HNTB Corporation, *Minneapolis-St. Paul International Airport: 14 CFR Part 150 Update, Updated Noise Exposure Map and Noise Compatibility Program*, v. 1 (Minneapolis: Metropolitan Airports Commission, November 2001), M-1 to M-4.

61 State agencies that propose rules under the state Administrative Procedure Act must satisfy additional procedural requirements if a proposed rule is "substantially modified" and the public was not provided "fair warning" of the changes (*Minn. Stat. (2002),* §14.05, subd. 2). MAC is not covered by this act.

Metropolitan Airports Sound Advisory Committee (MASAC) in October 2000 because of dissatisfaction with the composition of the committee, and a new advisory committee was not formed until Summer 2002. MAC staff told us that MASAC would have discussed changes to the draft if it had been functioning in Fall 2001, but it was not. Staff also said that, in the absence of such a group, the commission probably should have played a larger role in facilitating public discussions regarding the changes.

5 Governance Issues

SUMMARY

Despite MAC's many achievements, the agency merits additional state-level oversight. MAC operates with considerable autonomy, and the Governor and Legislature have engaged in a limited number of discussions regarding MAC's budget, policies, and performance in recent years. We do not recommend major structural changes, such as making MAC a state agency or changing its status as a regional airport authority. However, we recommend legislative confirmation of MAC appointees, more regular legislative hearings on MAC, clarification of commissioner terms in law, longer timeframes for public consideration of MAC's budget, and improved public information regarding MAC meetings.

The Metropolitan Airports Commission (MAC) is a 15-member body, with 13 members appointed by the Governor, 1 appointed by the Minneapolis mayor, and 1 appointed by the St. Paul mayor. The commission appoints an executive director, whose staff operate and promote activities at MAC's seven Twin Cities airports.

Some legislators and others have questioned whether MAC receives sufficient oversight. Some believe that management of major public facilities (including the state's primary airport) should not be left solely to a commission of appointed officials. Legislators have introduced various bills in recent years to change the governance or oversight of MAC. This chapter addresses the following questions:

- **How has the size and composition of the commission changed over time?**

- **To what extent (and by what means) have the Governor and Legislature held MAC accountable for its actions? What are the merits of possible changes to MAC's appointment process and its state-level oversight?**

- **How does MAC's governance structure compare with those of other agencies that operate large airports? How do the laws governing MAC compare with those for state agencies and other metropolitan agencies?**

- **Are there sufficient opportunities for public input into MAC's budget process? Does MAC provide sufficient and timely information about upcoming and past meetings?**

This chapter offers recommendations regarding some governance issues; for others, it discusses policy options (without recommendation) that the Legislature should consider. Appendix A contains a more complete discussion of the pros and cons of various governance options that the Legislature may wish to consider, including some options for which the case for legislation does not seem particularly compelling.

COMMISSION SIZE AND COMPOSITION

During the 1920s, the cities of Minneapolis and St. Paul developed competing airports. The 1927 Legislature authorized each of these cities to issue bonds for airport-related land acquisition and maintenance, and the 1931 Legislature authorized them to levy property taxes for airport operations.[1]

Initially, eight of MAC's nine members represented the cities of Minneapolis and St. Paul.

The 1943 Legislature created the Metropolitan Airports Commission (MAC) as a public corporation to operate the airports in Minneapolis and St. Paul.[2] According to one account, "the specific intention of the legislation was to end the expensive rivalry between Minneapolis and St. Paul in airport construction and to unite them in a program of airport development that would benefit not only the Twin Cities metropolitan area but also the entire state of Minnesota."[3] The law specified that the commission would have nine members: four from Minneapolis, four from St. Paul, and a chair from a county not contiguous to either Hennepin or Ramsey County. The Governor appointed the chair of MAC, while the other eight members were appointed by local officials (see Figure 5.1).

In 1974, the Legislature temporarily increased the size of the MAC commission from 9 to 15—by increasing the number of gubernatorial appointees from 1 to 7.[4] In addition to appointing the chair, as previously required by law, the Governor was authorized to appoint commissioners to represent various regions of the seven-county Twin Cities area.[5] However, the 1974 Legislature also required the transition to an 11-member commission in 1981—with a chair appointed by the Governor, eight other gubernatorial appointees (each representing two districts of the Twin Cities Metropolitan Council), and one appointee each by the Minneapolis mayor and St. Paul mayor. In 1989, the Legislature increased the size of the commission again from 11 to 15 by adding four gubernatorial appointees from outside the Twin Cities metropolitan area.[6] Overall,

1 *Laws of Minnesota* (1927), ch. 62, sec. 4; *Laws of Minnesota* (1931), ch. 273, sec. 1.

2 *Laws of Minnesota* (1943), ch. 500.

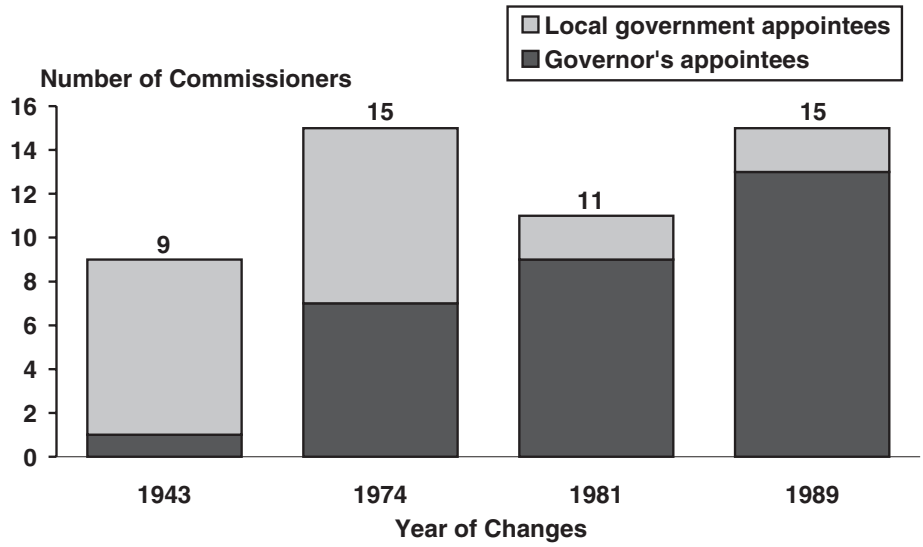
3 Donald Harper, "The Minneapolis-St. Paul Metropolitan Airports Commission," *Minnesota Law Review*, 55 (1971): 367.

4 *Laws of Minnesota* (1974), ch. 455, sec. 10.

5 The law authorized the Governor to appoint three persons to represent Carver, Scott, and Hennepin counties (not including Minneapolis), one person to represent Washington and Ramsey counties (not including St. Paul), one to represent Anoka County, and one to represent Dakota County.

6 *Laws of Minnesota* (1989), ch. 279, sec. 2.

Figure 5.1: Key Changes in MAC's Size and Appointers



SOURCE: *Laws of Minnesota* (1943), ch. 500, sec. 4; *Laws of Minnesota* (1974), ch. 455, sec. 10; *Laws of Minnesota* (1989), ch. 279, sec. 2.

Since 1989, 13 of MAC's 15 members have been appointed by the Governor.

- **The main changes in the commission's structure during the past 30 years were (1) an increase in the number of commissioners, (2) an increase in the proportion of members from places other than Minneapolis and St. Paul, and (3) an increase in the proportion of members appointed by the Governor.**

Table 5.1 shows the persons who have served as chairs of the Metropolitan Airports Commission since its start in 1943. For many years, state law required that MAC chairs reside in counties outside the Twin Cities metropolitan area—consequently, all of the chairs prior to 1984 were from outstate Minnesota. Since the law was changed, all MAC chairs have been residents of the Twin Cities area. The chair may receive a salary up to 25 percent of the Governor's salary; other MAC members receive compensation of $50 per diem.[7]

OVERSIGHT AND ACCOUNTABILITY

The Metropolitan Airports Commission operates with considerable autonomy, but it has extensive powers. For instance, state law authorizes MAC to issue bonds, exercise eminent domain rights, enter into contracts, acquire air rights and property, receive federal aid, adopt ordinances, spend the revenue it collects, conduct investigations, and sue. The law authorizes MAC to exercise its powers

7 *Minn. Stat.* (2002), §473.605, subd. 2. Members may also be reimbursed for "actual and necessary" expenditures.

Table 5.1: Metropolitan Airports Commission Chairs, 1943-2003

Dates Served	Chair	Home
7/43 – 9/47	Lewis Castle	Duluth
9/47 – 7/49	Albert Lobb	Rochester
7/49 – 7/50	Walter Rogosheske	Sauk Rapids
7/50 – 1/53	Roger Dell	Fergus Falls
1/53 – 8/72	Lawrence Hall	St. Cloud
8/72 – 12/83	Frank Befera	Duluth
1/84 – 12/86	Raymond Glumack	Bloomington
1/87 – 2/89	Harold Greenwood	Minneapolis
2/89 – 1/91	Thomas Holloran	Minneapolis
1/91 – 9/93	Hugh Schilling	St. Paul
9/93 – 1/95	Richard Braun	Columbia Heights
1/95 – 3/95	Wayne Popham	Hamel
4/95 – 4/99	Pierson Grieve	Sunfish Lake
5/99 – 1/03	Charles Nichols	Brooklyn Center
1/03 – present	Vicki Grunseth	Afton

SOURCE: Metropolitan Airports Commission.

"at any place within 35 miles of the city hall of either Minneapolis or St. Paul, and in the [seven-county Twin Cities] metropolitan area."[8] It also authorizes MAC to own, lease, construct, equip, operate or finance an aircraft maintenance facility in Duluth.[9] In general, the law provides MAC with broad authority over day-to-day decisions affecting its seven airports:

> [MAC] may generally carry on the business of acquiring, establishing, developing, extending, maintaining, operating, and managing airports, with all powers incident thereto except it is expressly prohibited from exercising these powers for the purpose of future construction of a major new airport.[10]

MAC has not used its taxing authority in recent years.

In addition, MAC has statutory authority to levy taxes upon taxable property within the Twin Cities metropolitan area—although it has not used this authority recently. MAC can levy a tax "not. . . subject to any limitation of rate or amount" to pay the debt service on its general obligation revenue bonds.[11] MAC levied taxes for debt service from 1949 to 1969, but it has not done so since then. MAC may also levy a tax for airport operations and maintenance, not to exceed 0.00806 percent of market value on taxable property.[12] Based on 2001 taxable market value, MAC could collect a maximum of about $12.5 million with this tax. However, MAC has not levied such a tax since 1961. State law also authorizes MAC to levy a tax to pay for the airport's police services, fire services, and

8 *Minn. Stat.* (2002), §473.608, subd. 1.

9 *Ibid.*

10 *Minn. Stat.* (2002), §473.608, subd. 16.

11 *Minn. Stat.* (2002), §473.667, subd. 3.

12 *Minn. Stat.* (2002), §473.671.

maintenance of streets and parking facilities.[13] MAC levied this tax until the early 1980s, but it has since paid for these services with rates and charges assessed to airport users.

The security for MAC's bonding authority has changed in some important ways over the years. When MAC was created, its bonds were backed by tax revenues from the cities of Minneapolis and St. Paul. In 1975, however, the law was amended so that any tax levies required to pay debt service on MAC bonds "shall not be restricted to the cities of Minneapolis and St. Paul but shall be levied against all the taxable property in the metropolitan area."[14] In 1991, the Legislature authorized MAC to issue bonds payable solely from airport revenues,[15] and revenue bonds now comprise the large majority of MAC's bond issuances.

Overall, MAC's statutory authority is extensive. As one observer commented,

> The state legislature went much farther than was necessary if all it wished to do was to end the strife between Minneapolis and St. Paul in connection with airport construction. Instead it created a very powerful independent special purpose agency with complete power not only over airports but also over aeronautics in general and gave it jurisdiction over an area much larger than the two cities themselves.[16]

MAC has important powers and responsibilities, and it operates with significant autonomy.

MAC's far-reaching powers and potential for impact on a major industry are important reasons to ensure that the agency is sufficiently accountable for its actions. All of MAC's revenues are considered "public funds," according to state law, and this also suggests a need for public accountability.[17] To help us assess the adequacy of MAC's state-level oversight, we examined state laws, interviewed officials in the state legislative and executive branches, interviewed present and former MAC commissioners and administrators, and reviewed available information on the governance of other airports and Twin Cities metropolitan agencies. The following sections discuss MAC's present governance structure and how it compares with those of other agencies. At the end of this discussion, we offer recommendations for changes.

Appointments

MAC's executive director and staff of more than 500 are responsible for the day-to-day decisions that affect airport operations at the seven MAC airports in the Twin Cities area. Ultimately, however, the staff are accountable to the agency's 15 commissioners. MAC's bylaws state that:

---

13 *Minn. Stat.* (2002), §473.627.

14 *Minn. Stat.* (2002), §473.672.

15 *Minn. Stat.* (2002), §473.6671.

16 Harper, "The Minneapolis-St. Paul Metropolitan Airports Commission:" 375-376.

17 *Minn. Stat.* (2002), §473.606, subd. 3.

> The Commissioners, acting for the corporation, have the responsibility to determine and establish the corporation's policy in the fulfillment of its statutory responsibilities and to interpret the same to the corporation's Executive Director and to the Commission staff. The corporation's Executive Director, acting through the Commission staff and consultants, shall have the responsibility for the operation of the corporation in accordance with such policy, and to that end, shall be accountable to the Commission.[18]

The members of the Metropolitan Airports Commission are appointed, not elected. For this reason, it is important to consider the statutory provisions governing MAC's appointment process. State law provides for appointment of all members of Twin Cities metropolitan agencies, including the Metropolitan Council, Metropolitan Parks and Open Space Commission (MPOSC), Metropolitan Sports Facilities Commission (MSFC), Metropolitan Mosquito Control District (MMCD), and MAC.[19] As shown in Table 5.2, state laws have varying provisions regarding appointments to these agencies. In general, however, the law is more prescriptive regarding the appointments to the Metropolitan Council than appointments to other metropolitan agencies, including MAC. For example, Metropolitan Council members are the only members of metropolitan agencies whose appointments are subject to confirmation by the state Senate. Also, the Metropolitan Council—unlike MAC—is required to (1) have a nominating or appointments committee to identify potential candidates for appointment, and (2) issue notices in local newspapers regarding vacancies and term expirations.

Our review of appointment laws also indicated that:

- **The terms of 8 of the 15 MAC commissioners are not specified in state law, unlike the terms of members of other metropolitan agencies.**

State laws governing the terms of MAC commissioners are inconsistent.

State law says that the MAC chair and each of the four commissioners from outstate Minnesota shall serve four-year terms. In addition, the terms of the two commissioners appointed by the mayors of Minneapolis and St. Paul coincide with the terms of each mayor, according to the law. But the law has no provisions regarding the terms of the remaining eight MAC commissioners, each of whom represent 2 of the 16 Metropolitan Council districts.[20] In recent years, the Governor's MAC appointees have been appointed on a staggered basis, with the understanding that all of the appointments will be for four-year terms. However, without clear statutory language regarding terms, a Governor would not be bound to this schedule. Furthermore, the law has no provision for how the eight MAC commissioners who represent Metropolitan Council districts will be affected by Metropolitan Council redistricting, which is scheduled to occur in 2003. For

18 Metropolitan Airports Commission, *Bylaws and Rules of Procedure* (as revised February 22, 2002), art. IV, no. 1.

19 Unlike the other agencies listed, the MMCD is not defined in law as a "metropolitan agency" and does not have a formal relationship with the Metropolitan Council.

20 It is unclear why the 1994 Legislature eliminated statutory language related to the terms of the commissioners, yet retained language that outlines circumstances in which commissioners may be removed.

Members of metropolitan agencies are appointed in various ways.

Table 5.2: Requirements in State Law Regarding Appointments to Metropolitan Agencies

	Metropolitan Airports Commission	Metropolitan Council	Metropolitan Parks and Open Space Commission	Metropolitan Sports Facilities Commission	Metropolitan Mosquito Control District
Number of members?	15	17	9	7	17
The chair is selected by:	Governor	Governor	Metropolitan Council	Governor	Vote of members
Other members are selected by:	Governor (12) and mayors (2)	Governor	Metropolitan Council	Minneapolis City Council	County elected officials
Are members confirmed by Senate?	No	Yes	No	No	No
Must local legislators be consulted about appointments?	Yes (for Governor's appointees only)	Yes	Yes	No	No
Are there requirements regarding member characteristics (other than residence requirements)?	No	Yes[a]	No	No	Yes[b]
Must a nominations or appointments committee identify potential candidates?	No	Yes	Yes	No	No
Must local newspapers publish notices regarding vacancies and term expirations?	No	Yes	Yes	No	No
Does the law specify the terms of all members?	No—only 7 of 15 members	Yes	Yes	Yes	Yes
Under what circumstances may members be removed?	The chair serves "at the pleasure of the governor." Other members may be removed "for misfeasance, malfeasance, or nonfeasance."	All members serve "at the pleasure of the governor."	The chair serves "at the pleasure of the [Metropolitan Council]." Other members may be removed "for cause."	Members may be removed "for cause."	No provisions

[a]The law says that Metropolitan Council members must be "knowledgable about urban and metropolitan affairs," and they should reflect the "various demographic, political, and other interests in the metropolitan area and the districts."

[b]Appointees shall be members of their respective county boards of commissioners.

SOURCE: *Minn. Stat.* (2002), §473.

instance, the law does not address whether the terms of the present MAC commissioners from Metropolitan Council districts will end immediately following redistricting. In addition, if the Governor must make new appointments following redistricting, there are no provisions in law for staggering the terms of the commissioners.

While important for accountability, gubernatorial appointment of MAC commissioners by itself does not ensure subsequent oversight of their performance.

Because the MAC commissioners are not elected, their oversight by elected officials is a potentially important means of public accountability. However,

- **The Governor's authority to appoint and review 13 of the 15 MAC commissioners has been a limited mechanism for accountability.**

First, the appointment of MAC commissioners by the Governor does not ensure subsequent oversight of the commission's performance. Most MAC commissioners we spoke with said they have had few, if any, communications with the governors who appointed them. Even MAC *chairs* sometimes have very limited contact with the Governors who appoint them. Governor Ventura and his appointee as MAC chair met on only a few occasions from 1999 through 2002.[21]

Second, the Governor has limited authority in state law to remove MAC commissioners. The MAC chair may be removed "at the pleasure of the Governor,"[22] and Governor Carlson replaced a MAC chair in 1993 due to differences of opinion on airport policy. In contrast, state law says that commissioners other than the chair may be removed only for misfeasance, malfeasance, or nonfeasance in office, following an opportunity to defend themselves in response to written charges.[23] MAC officials could recall no such removals. The laws governing most state boards and commissions do not authorize removal of members "at the pleasure of the Governor"—rather, the law typically authorizes removal only for "cause" or poor attendance at meetings. Such provisions—similar to MAC's—insulate these commissions somewhat from political influences and help to ensure some continuity of membership from one gubernatorial administration to the next. In contrast, however, all 17 members of the Metropolitan Council serve at the pleasure of the Governor. Such a provision gives the Governor immediate authority to influence the composition and direction of the council.

Third, the Metropolitan Airports Commission is relatively large, which may also weaken the Governor's ability to exercise oversight. At 15 members, MAC is larger than all but one of the commissions that oversee large hub airports in the U.S.[24] A large commission has more diffuse accountability than smaller commissions—that is, there are more individuals who share responsibility for commission decisions. In addition, Governors may need to appoint more individuals to change the make-up or underlying philosophy of a large commission, compared with a smaller one. A large commission may offer some practical advantages over smaller commissions in its daily work—for example, by

21 In contrast, Governor Carlson and his most recent MAC chair met several times a year from 1995 to 1999, particularly to discuss the dual track airport planning process.

22 *Minn. Stat.* (2002), §473.604, subd. 1.

23 *Minn. Stat.* (2002), §473.605, subd. 3.

24 St. Louis has a 17-member airport commission. Among the 40 largest airports, the median size for an airport authority is nine members.

allowing the commission's workload to be split among more persons—but a large commission is probably more difficult for a Governor to influence and hold accountable.

Finally, the complicated nature of MAC's appointment structure might also weaken accountability; at a minimum, it is confusing. For instance, the law divides responsibility for appointing MAC members among three elected officials (the Governor and two mayors). Also, MAC's commissioners represent multiple—and sometimes overlapping—geographic areas: the cities of Minneapolis and St. Paul, Metropolitan Council districts covering all of the seven-county metropolitan area (including Minneapolis and St. Paul), and outstate Minnesota.[25] As noted earlier, there are varying statutory provisions governing the terms and removal of these commissioners.

Legislative Oversight

State law says that MAC is accountable to the Legislature.

Besides the Governor, the Legislature could be an important state-level mechanism for overseeing MAC and holding it accountable. According to state law:

> [MAC] shall be held accountable to the legislature in its activities, plans, policies, and programs. It shall report each session to appropriate committees of the legislature as to its activities, plans, policies, and programs and shall make other reports and recommendations which the legislature or its committees deem appropriate.[26]

The Legislature has occasionally focused on specific issues related to MAC and the future of Twin Cities airports. There was extensive legislative debate from 1988 through 1996 regarding the "dual track planning process," culminating in the Legislature's 1996 decision to keep the airport at the present site. The 1996 Legislature provided specific direction to MAC and the Metropolitan Council in several areas—for example, requiring implementation of the 2010 Long-Term Comprehensive Plan for the Minneapolis-St. Paul Airport, requiring the maximum feasible diversion of planes to the reliever airports, prohibiting construction of a third parallel runway, prohibiting construction of a replacement passenger terminal on the west side of the airport, prohibiting "landbanking" for a major new airport, and requiring expenditure of $185 million on noise-related insulation and property acquisition.

However, legislative oversight of MAC has been limited.

Since the end of the dual track process, the Legislature has considered bills regarding possible expansion of reliever airports and changes in MAC's governance structure.[27] In addition, the Legislature held hearings following the

25 A resident of Minneapolis or St. Paul is represented on MAC by a commissioner appointed by the mayor of that city, as well as by a commissioner who represents that resident's Metropolitan Council district. Thus, Minneapolis and St. Paul residents have more representation on MAC than other residents of the Twin Cities region.

26 *Minn. Stat.* (2002), §473.621, subd. 1a.

27 In addition, the Legislature created a Select Commission on Air Transportation and Economic Security following the September 11, 2001 attacks, and this commission had several hearings regarding challenges faced by Minnesota's airline industry.

September 11 attacks to discuss ways the state could help Minnesota-based airlines. But, although MAC officials have frequent contact with legislators and have testified in legislative committees on many occasions,

- **During the past several years, legislative committees have not devoted much attention to MAC's budget or overall performance.**

The House and Senate have committees that focus on transportation and local or regional government issues. Among other topics, these committees could discuss issues related to airport finances, policies, competition, or capital projects. Legislative committees have occasionally discussed MAC while considering bills related to airports or airport governance, but there was only one instance in the past four years in which a House or Senate standing committee broadly reviewed MAC's operations or budget.[28] Also, although the law requires MAC to prepare annual reports for the Legislature on its operations, legislative committees have usually not discussed these reports in hearings.[29]

State law mandates more oversight of the Metropolitan Council than MAC.

None of the Twin Cities metropolitan agencies has its budget approved by the Legislature.[30] In fact, no legislative fiscal analysts regularly review MAC's budget—in part, because MAC does not receive state funds. However, the Legislature could give metropolitan agencies more attention—as it did in 2001 when it created the Legislative Commission on Metropolitan Government to improve oversight of the Metropolitan Council. The law limits this commission's scope to the Metropolitan Council, and it does not mention other metropolitan agencies, such as MAC. This commission is required by law to review the Metropolitan Council's's capital and operating budgets, work programs, tax levies, requests for debt increases, and appointments. The commission's oversight responsibilities could be extended in law to other agencies, such as MAC, but the current commission chair told us that oversight of the Metropolitan Council alone has been a challenging workload.

MAC is required by state law to annually provide the Legislature with reports on salary comparisons, employee benefits, ethical practices requirements, and communications between commission members and local officials. For some of these topics, MAC's reports have provided little useful information that could serve as a basis for legislative discussion. For instance, MAC's recent reports on salaries have asserted that "[MAC] salaries are also comparable to similar organizations in other parts of the country," but they have provided no documentation.[31] In addition, MAC is supposed to report on "the activities undertaken [by each commissioner] to meet regularly and communicate with local officials and legislators in the member's district about issues before the agency or council,"[32] but the reports produced annually by MAC have provided little

28 In 2001, the House Local Government and Metropolitan Affairs Committee had two hearings at which it conducted an overview of MAC and the airport system.

29 MAC has provided information to legislators and their staff in some less formal ways—for example, through airport tours and personal briefings.

30 The Legislature does appropriate transit subsidies that are administered by the Metropolitan Council.

31 MAC, Metropolitan Council, and Metropolitan Sports Facilities Commission, *Metropolitan Agencies Personnel, Ethical Practices and Communications Activities* (St. Paul, January 2002), 36. Identical sentences appear in the 2000 and 2001 reports.

32 *Minn. Stat.* (2002), §473.1623, subd. 6.

information regarding the frequency or nature of these contacts. Typically, MAC's report lists the topics in which commissioners are interested and the MAC committees on which they serve.[33]

A final means by which the Legislature can hold MAC accountable is through legislatively-authorized audits and evaluations. The Office of the Legislative Auditor conducts a financial audit of selected MAC issues approximately once every four years.[34] In addition, the Legislative Audit Commission has directed staff in the Office of the Legislative Auditor to evaluate MAC on two occasions: for a report on airport planning (1993) and for this report. Such audits and evaluations—although infrequent—are a way that the Legislature can hold MAC accountable and examine airport-related issues.

Reviews by Other Agencies

Various federal, state, and metropolitan agencies play a role in oversight or regulation of MAC's activities. Of particular note, the federal government regulates a variety of aspects of airport operations, and it has administrative procedures for responding to complaints about airport compliance. For instance, the Federal Aviation Administration (FAA) monitors whether airports seeking federal funds for noise mitigation have followed federal regulations for measuring noise and addressing incompatible land uses. In addition, the FAA reviews airports' competition plans, proposals for use of passenger facility charges, and applications for federal grants. Federal policies prohibit the diversion of airport revenues for non-airport purposes and set basic standards regarding airport planning and construction, airport operations, and the establishment of airport rates and charges. A recently created federal agency—the Transportation Security Administration—reviews airports' compliance with federal requirements regarding passenger and baggage screening. The federal government does not play a role in development or review of MAC's annual budget.

The federal government regulates various aspects of airport operations.

The Twin Cities Metropolitan Council also oversees certain aspects of MAC's activities.[35] State law requires the council to review MAC plans to ensure that they are consistent with the council's development guidelines.[36] In addition, state law requires the council to *review* capital projects at Minneapolis-St. Paul International Airport that exceed $5 million and other MAC projects exceeding $2 million.[37] According to state law, the following categories of capital projects require Metropolitan Council *approval* before they can proceed: (a) the location of a new airport, (b) a new runway at an existing airport, (c) a runway extension at an existing airport, (d) runway strengthening, (e) construction of passenger

33 MAC, Metropolitan Council, and Metropolitan Sports Facilities Commission, *Metropolitan Agencies Personnel, Ethical Practices and Communications Activities* (St. Paul, January 2002), 37-39. The previous two reports have similar summaries, and they are less specific than the discussions provided by the Metropolitan Council and Metropolitan Sports Facilities Commission.

34 In addition to the periodic financial audits by the Office of the Legislative Auditor, MAC retains a private accounting firm to audit its financial statements annually.

35 State law requires MAC to reimburse the Metropolitan Council for the costs it incurs in its discharge of MAC-related responsibilities. Over the past four years, the Council's charges ranged from $61,712 (2000) to $134,663 (1999).

36 *Minn. Stat.* (2002), §473.181, subd. 5.

37 *Minn. Stat.* (2002), §473.621, subd. 6.

handling or parking facilities which would permit 25 percent or greater increases in passenger enplanements, and (f) land acquisition associated with any of the above that requires residential or business relocation.[38]

Some of MAC's capital projects require approval by the Metropolitan Council.

The council has never rejected a capital project proposed by MAC, but in 2002 the council threatened to reserve approval of MAC's capital program unless MAC committed to spend $150 million on sound insulation projects in the 60-64 DNL noise contour (see Chapter 4). State law does not explicitly mention sound insulation projects as a category of capital projects that the Metropolitan Council may *approve*, although these projects often surpass the dollar threshold that determines which projects the council will *review.*

In addition, several state agencies play a role in MAC activities. The Minnesota Pollution Control Agency regulates airport environmental quality—for example, examining the water-related impacts of deicing chemicals and airport construction projects. The Minnesota Environmental Quality Board sets criteria for environmental reviews and determines the adequacy of MAC's environmental impact statements. The Minnesota Department of Transportation establishes off-airport zoning criteria and administers federal and state airport grants.

Governance by Independent Authorities Versus Governmental Agencies

Table 5.3 shows the types of governing bodies used by the 40 largest U.S. airports. Aviation departments of city or county governments manage 45 percent of the largest airports, such as those in Atlanta, Chicago, and Los Angeles. However, a larger proportion of these airports (50 percent) are governed by some type of public authority other than cities or counties.[39] Most of these authorities focus solely on airports, but some are port authorities that manage non-airport facilities, too. We found that:

- **Airport management literature has generally favored governance of airports by independent authorities (such as MAC) rather than by local government bodies, and U.S. airports have increasingly adopted this approach.**

A sampling of airport management literature includes the following comments:

> Most airport textbooks state that airport authorities are the preferred method of ownership because (1) the leadership is more focused on airport issues, (2) the airport staff is less subject to political interference, and (3) a metropolitan community can be better represented by the authority's governing body.[40]

---

38 Minn. Stat. (2002), §473.621, subd. 6, 7. Such projects are deemed to have "a significant effect on the orderly and economic development of the metropolitan area."

39 Some of the locally-owned airports—such as those in San Francisco and New Orleans—also have commissions of locally-appointed officials that set airport policies.

40 Sam Hoerter, *Airport Management Primer*, 2nd ed. (Alexandria, VA: American Association of Airport Executives, 2001), 12.

Airport authorities govern about half of all large airports, and local governments manage most of the rest.

Table 5.3: Governance Arrangements at Large U.S. Airports

Airport	2000 Enplanements (in millions)	Governed by:
Atlanta	39.3	City
Chicago-O'Hare	33.8	City
Los Angeles	32.2	City
Dallas-Fort Worth	28.3	Airport authority
San Francisco	19.6	City[a]
Denver	18.4	City/county
Phoenix	18.1	City
Las Vegas	17.4	County
Detroit	17.3	Airport authority
Newark	17.2	Port authority
Minneapolis-St. Paul	**17.0**	**Airport authority**
Miami	16.5	County
Houston	16.4	City
New York-John F. Kennedy	16.2	Port authority
St. Louis	15.3	Airport authority
Orlando	14.8	Airport authority
Seattle-Tacoma	13.9	Port authority
Boston	13.6	Port authority
New York-LaGuardia	12.7	Port authority
Philadelphia	12.3	City
Charlotte	11.5	City
Cincinnati	11.2	Airport authority
Honolulu	11.2	State
Pittsburgh	9.9	Airport authority
Baltimore-Washington	9.7	State[b]
D.C.-Dulles	9.6	Airport authority
Salt Lake City	9.5	City
Tampa	8.0	Airport authority
San Diego	7.9	Airport authority
Fort Lauderdale	7.8	County
D.C.-Reagan National	7.5	Airport authority
Chicago-Midway	7.1	City
Portland	6.8	Port authority
Cleveland	6.3	City
San Jose	6.2	City
Kansas City	5.9	City
Memphis	5.7	Airport authority
Oakland	5.2	Port authority
Raleigh-Durham	5.2	Airport authority
New Orleans	4.9	City*

[a]A mayor-appointed board oversees airport policy and operations.

[b]A state aviation commission sets policies to improve and promote this airport.

SOURCES: Office of the Legislative Auditor—review of airport websites; phone calls. Enplanement data from U.S. Federal Aviation Administration, http://www.faa.gov/arp/planning/vphubs.pdf; accessed December 10, 2002.

Management literature has generally favored the governance of airports by independent authorities.

> There is an expert consensus that independent airport authorities are the preferred governance structure for commercial airports. There has been a national and even worldwide trend toward removing governance from the normal operations of governmental decision-making by placing airports under the jurisdiction of independent airport authorities.[41]
>
> Since the independent special district provides airport management with the greatest autonomy amongst the various governmental forms, the interests of the airport can be served more directly, and with less interference from outside political influence. The airport authority is self serving, unencumbered by the sundry general welfare responsibilities of cities and counties, and is established solely for the purpose of promoting the airport and aviation service to the community.[42]

Airports in several major cities have switched to independent governing authorities in recent years, and we are not aware of any major airports that have recently changed from independent authority governance models to governance by city or county agencies. Some recent changes include:

- The Wayne County Airport Authority, a seven-member board, assumed duties in 2002 for managing the **Detroit** airport. Previously, the airport was managed by the county.

Increasingly, airports are being governed by semi-autonomous airport authorities (such as MAC) rather than by local governments. The Detroit airport (shown here) implemented such a structure in 2002.

41 Clyde W. Barrow, David R. Borges, and Victor S. DeSantis, *The New Bedford Regional Airport: Governance Structures at Comparable Airports in the United States*, v. 1 (Dartmouth, MA: Center for Policy Analysis, May 1996), xi.

42 Laurence E. Gesell, *The Administration of Public Airports*, 4th ed. (Chandler, AZ: Coast Aire Publications, 1999), 25.

- In 2002, management of the **San Diego** airport transferred from the local port authority to the San Diego County Regional Airport Authority. The nine members of this new authority focus exclusively on airport issues.

- In 1999, the nine-member Allegheny County Airport Authority began managing the **Pittsburgh** airport, which was previously operated by the county.

The "independence" of an airport authority might enable it to make decisions more quickly or with less review by governmental agencies, potentially improving its responsiveness to airlines, airport businesses, travelers, or others. Although Northwest Airlines officials told us that MAC needs more public oversight, they preferred to have MAC as an independent authority rather than an agency of local or state government.

The 2002 Legislature considered bills that would have made MAC a state agency.

In 2002, the Legislature considered bills that would make MAC a state agency (or part of the Minnesota Department of Transportation). We found that:

- **Airport governance by state agencies is relatively uncommon. States own just 2 of the 40 largest U.S. airports.**

The Honolulu airport is operated by the Hawaii Department of Transportation. The Baltimore-Washington airport is owned by the state of Maryland, but a nine-member commission sets policies for the airport. Three other states (Rhode Island, Connecticut, and Alaska) own smaller international airports.[43] We are aware of only three states—Alaska, Hawaii, and Maryland—in which the state legislature approves a major airport's operating budget.

Because the 2002 Legislature showed some interest in making MAC a state agency, we examined differences in the operating practices of MAC and state agencies. Even if previous legislatures have decided that there are good reasons for an airport authority to operate under different procedures than a state agency, it may be useful for current legislators to explicitly consider these differences. Also, any future proposals to make MAC a state agency would likely have to address differences in MAC and state agency operating practices.

We found that:

- **There are important differences in the operating practices of MAC and state agencies, particularly in the areas of collective bargaining, pension systems, rule-making procedures, purchasing requirements, and budget review.**

Table 5.4 shows that there are several areas in which MAC and state agencies operate under the same laws. For instance, MAC and state agencies operate under state laws governing open meetings, ethics in government, and data practices.

43 Since 1993, the seven-member Rhode Island Airport Corporation has operated the state-owned airport system, including T.F. Green International Airport; previously, the airport was run by a state agency. Connecticut's Department of Transportation operates the Bradley International Airport, and a legislatively-established, seven-member board approves the airport's operating and capital budgets. The Alaska Department of Transportation and Public Facilities operates the Anchorage and Fairbanks International Airports.

Table 5.4: Comparison of Operating Practices Used by MAC and State Agencies

Use the same practices:

	MAC	State Agencies
Ethics	Under *Minn. Stat.* §10A, MAC's commissioners and executive director are subject to a gift ban, financial disclosure, and conflict of interest disclosure.	Under *Minn. Stat.* §10A, top state agency administrators are subject to a gift ban, financial disclosure, and conflict of interest disclosure.
Data practices	Subject to the Minnesota Data Practices Act (*Minn. Stat.* §13).	Subject to the Minnesota Data Practices Act (*Minn. Stat.* §13).
Open meetings	Subject to the state open meeting law (*Minn. Stat.* §13D).	Agencies headed by a single commissioner do not have "meetings," so *Minn. Stat.* §13D does not apply. However, the law applies to agencies headed by governing bodies.
Financial audits	By Office of the Legislative Auditor.	By Office of the Legislative Auditor.

Use different practices:

	MAC	State Agencies
Contracts and purchases	MAC can purchase goods and services without external approval. The Uniform Municipal Contracting Law (*Minn. Stat.* §471.345) governs MAC's construction work and purchases of supplies, equipment, and materials. In addition, MAC has "the power to appoint engineers and other consultants, attorneys, and such other officers, agents, and employees as it may see fit, who shall perform such duties and receive such compensation as the corporation may determine, and be removable at the pleasure of the corporation" (*Minn. Stat.* §473.606, subd. 5).	The state Commissioner of Administration acquires goods and services needed by state agencies. (Such duties may be delegated to agencies, but the Commissioner of Administration retains control of the process.) *Minn. Stat.* §16C governs state agency contracting and purchasing. Contracts are not valid unless approved by the Commissioner of Administration and the attorney general. Contracts for professional or technical services are subject to additional restrictions in law.
Civil service	Employees are not covered by civil service laws.	Employees are covered by state civil service laws (*Minn. Stat.* §43A)
Collective bargaining	MAC's bargaining units have only MAC employees. The Metropolitan Airports Commission is the employer for purposes of bargaining and contract administration.	Employees are assigned to statewide, occupationally-based bargaining units. The Commissioner of Employee Relations is the employer.
Retirement system	Public Employee Retirement System.	Minnesota State Retirement System.
Operating budget	Annually, the Metropolitan Airports Commission prepares and approves its own budget. The commission collects and spends revenues and does not receive legislative appropriations. MAC does not use the state's accounting, procurement, and human resources information systems. MAC sets the fees that it charges, without legislative review.	State agencies are subject to the Governor's biennial budget process. Revenues are deposited in the state treasury and can be spent only pursuant to an appropriation. Agencies use the statewide information systems for accounting, procurement, and human resources purposes. Increased fees require legislative approval unless they are for the direct and primary use of an individual or entity.
Capital budget	Metropolitan Airports Commission prepares and approves its own budget. Large capital projects are subject to Metropolitan Council review.	Agency capital budget proposals are subject to approval by the Governor and Legislature.
Asset investment	By MAC treasurer.	By State Board of Investment.
Rules and ordinances	MAC adopts ordinances. *Minn. Stat.* §473.608, subd. 17 requires public hearings in certain cases.	Agencies adopt rules through the Administrative Procedure Act (*Minn. Stat.* §14), unless exempted.
Legal actions	MAC hires its own counsel and conducts its own legal actions.	Attorney general represents state agencies and conducts legal actions.

SOURCES: Mark Shepard and Wendy Simons, Minnesota House of Representatives Research Department, memorandum to Representative Jim Rhodes, *MAC as a State Agency*, November 29, 2001; Office of the Legislative Auditor review of Minnesota statutes.

Also, MAC and state agencies are subject to periodic financial audits by the Office of the Legislative Auditor.

On the other hand, the table shows many areas in which MAC and state agency practices differ significantly. For example, MAC employees are represented by different collective bargaining units than state agency employees, and they have different retirement systems. This was one reason that some legislators concluded during the 2002 legislative session that a bill to make MAC a state agency would be impractical. In addition, state agencies and MAC are subject to different laws regarding purchasing and rule-making procedures. MAC has authority to enter contracts or make purchases without authorization from an external agency, and MAC's internal process for adopting ordinances is less time-consuming than the statutorily-designated process that state agencies must follow to promulgate state rules. Also, because MAC does not receive state funds, its budgets are not subject to approval by the state's executive or legislative branches.

Recommendations and Options

The Metropolitan Airports Commission has managed the airport system in the Twin Cities region for 60 years, and its track record is a strong one. Minneapolis-St. Paul International Airport is recognized as one of the nation's best airports. MAC has assembled an experienced, respected management team. The commission has an extensive noise mitigation program and is presently administering an ambitious expansion of airport facilities. MAC has accommodated one of the state's largest private employers (Northwest Airlines) while encouraging airport competition. Over the years, many people have expressed concern that MAC is staff-dominated, but we observed instances in which MAC commissioners showed assertiveness and independence during public discussions.

MAC's actions often have wide-scale impacts and merit attention from state officials.

Despite MAC's achievements, we think there are legitimate questions about oversight of MAC and its public accountability. The airport authority governance structure provides MAC with management flexibility, but MAC receives less scrutiny and enjoys more independence than a traditional government agency. Likewise, there has long been concern about the accountability of regional agencies in the Twin Cities area. [44]

MAC has considerable autonomy to make budget and policy decisions without the approval of elected officials. While there are other public bodies in which decisions are made without the approval of elected officials, MAC's decisions are unique because so much is at stake. As a manager of one of the nation's largest airports (and six smaller airports), MAC makes large-scale capital investment decisions that can affect air travel in the region for years to come. [45] Also, MAC's

44 For example, a 1983 legislative commission on metropolitan agency governance concluded: "If one subject predominated, in all of the [legislative] Commission's hearings, it was that of accountability… Indeed, there seems to be a consensus that nearly all the important lines of external accountability are weak and that, as a result, the metropolitan agencies increasingly take on one of the distinguishing characteristics of special districts: insularity." *Report of the Legislative Commission on Metropolitan Governance* (St. Paul, May 1983), 3-4.

45 State law prohibits MAC from making unilateral decisions regarding construction of a major new airport (*Minn. Stat*. (2002), §473.608, subd. 16). However, legislative decisions regarding a new airport would undoubtedly rely considerably on MAC's estimates of future airport needs.

decisions can affect the operations of Minnesota-based airlines, which are a critical part of the state's economy. Furthermore, MAC decisions about airport operations affect travelers throughout the state, and airport-related noise and pollution can affect thousands of residents in communities near MAC's airports. Finally, although airline officials generally think that MAC runs Minneapolis-St. Paul Airport effectively, they have raised valid concerns about some individual actions by MAC. For instance, MAC staff initially proposed a large budget increase for 2003 despite the airline industry's serious financial problems (see Chapter 2), and MAC took a gate from Northwest Airlines and gave it to United Airlines in 1999 without sufficient assurances that United would use the gate (see Chapter 3).

Overall,

- **We do not recommend that the Legislature make large-scale structural changes in MAC at this time, but we think that the Legislature should consider ways to improve state-level oversight of MAC.**

In our view, it is preferable for MAC to continue operating as a regional agency, rather than as a department of a local unit of government. The challenge of running a major airport requires a structure that is capable of looking beyond the boundaries of an individual city or county. In addition, we think that MAC should continue to operate as an airport authority, not as a state agency. Although a few states own and operate airports, a decision to make MAC a state agency would be very disruptive and should be a last resort. MAC has established a solid reputation as an airport operator, and it would be preferable to focus in coming years on issues such as the airport's continued viability at its present location, rather than on the challenges that would be required by a major change in the airport's management structure.

MAC commissioners should be confirmed by the Senate.

We do think, however, that the Legislature should strengthen its own oversight of MAC. As a starting point, the Legislature should participate more directly in the process by which MAC commissioners are appointed. In our view, legislative confirmation of appointees to MAC would serve two important purposes. First, it would broaden the involvement of elected, state-level public officials in decisions regarding MAC's leadership, rather than relying solely on the choices of one state official (the Governor). Second, confirmation hearings would provide an opportunity for dialogue between legislators and prospective commissioners regarding a variety of airport issues. We think there is justification for legislative confirmation of the 13 commissioners appointed by the Governor.

RECOMMENDATION

The Legislature should amend state law to require Senate confirmation of the Governor's appointees as MAC commissioners.

Some persons we spoke with expressed concern that legislative confirmation might "politicize" the appointment process, perhaps discouraging qualified people from serving. There is always a possibility that the legislative process will be

contentious, but it can also be constructive. Senate confirmation is a widely-accepted tradition for important appointments, ranging from state agency heads and Metropolitan Council members to appointees to a variety of state boards and commissions.[46] It is reasonable to expect that the Legislature—which created MAC and established many of the laws that govern it—should confirm the appointees to an agency with significant statewide impact.

Legislators should explicitly decide whether to have MAC commissioners serve fixed, staggered terms or serve at the pleasure of the Governor.

We also recommend that the Legislature clarify state law regarding the terms of MAC commissioners appointed by the Governor. Of the 13 MAC commissioners appointed by the Governor, 8 have terms that are not specified in law, 4 have four-year terms (specified in law), and the chair serves at the pleasure of the Governor (specified in law).[47] We think it is certainly appropriate for the chair to serve at the pleasure of the Governor, thus permitting the Governor to replace the chair at any time. For the other MAC commissioners appointed by the Governor, the Legislature should specify a consistent term of service—either (1) service at the pleasure of the Governor, or (2) staggered, four-year terms. There is precedent for both approaches in state law, although staggered, defined terms are more common.[48] If commissioners were to serve at the Governor's pleasure, a new Governor could replace all commissioners at one time—making MAC more immediately accountable to an elected official, but also more subject to political influences. In addition, it might be challenging for a new Governor to immediately select 15 well-qualified MAC appointees (rather than selecting them over the course of several years), and there might be a benefit to having some continuity of commission membership from the term of one Governor to the next. Overall, we think there are important issues for the Legislature to weigh when deciding the preferred policy for MAC appointees' terms of service, but we think it is essential for the Legislature to address the existing law's inconsistent and ill-specified provisions on this topic. In addition, there are no provisions in law for how commissioners' terms will be affected by Metropolitan Council redistricting, scheduled to occur in 2003.

RECOMMENDATIONS

The Legislature should specify in state law the terms of all MAC members appointed by the Governor—that is, whether they serve at the pleasure of the Governor or for a specified term. For the MAC members appointed to represent Metropolitan Council districts, the Legislature should also specify in law how these members' terms and appointments will be affected by Metropolitan Council redistricting.

46 There have been some proposals for the House of Representatives to play a role in confirmation proceedings, but the Minnesota Constitution provides that the Governor may appoint public officials "with the advice and consent of the senate" (*Minn. Const*., art. V, sec. 3.).

47 As noted earlier, the terms of the eight commissioners who each represent two Metropolitan Council districts are not specified in law. Because of the absence of statutory provisions, it could be argued that these commissioners serve at the pleasure of the Governor, although they were appointed with the general understanding that they would serve four-year terms. For example, the MAC web site lists four-year terms for these members, beginning on their varying dates of appointment.

48 In contrast, all 17 members of another major regional agency (the Metropolitan Council) serve at the pleasure of the Governor.

Without changing state law, the Legislature could strengthen its oversight of MAC.

We also think that the Legislature should play a more active, ongoing role in MAC's oversight. In our view, this can occur without changes in state law. Standing committees of the Legislature that deal with transportation issues and local affairs should hold hearings on MAC more often than they have in recent years. Among the issues that legislators may wish to explore are: (1) MAC's performance, policies, and budget, (2) the role of Minnesota-based airlines in the state economy, (3) competition at Minneapolis-St. Paul International Airport, and (4) the ability of existing airport facilities to meet the region's future aviation needs. If necessary, the Legislature could also consider expanding the role of the Legislative Commission on Metropolitan Government to include MAC in its jurisdiction.

RECOMMENDATION

Legislative committees should periodically hold hearings on MAC—to discuss MAC's budget, performance, and other airport-related issues.

At this time, we do not recommend that the Legislature *approve* MAC's operating or capital budgets. MAC does not receive a state appropriation, and state budget officials told us that there is no precedent in Minnesota for the Legislature to approve the operating budget of an agency that does not receive a state appropriation.[49] Likewise, they said that there is no precedent for legislative approval of capital projects that are not funded by the state. Furthermore, even airline officials who favor greater oversight of MAC worry that legislative reviews of MAC's budget might not be timely, potentially delaying important airport projects.

However, we think that the Legislature should periodically *review* MAC's budgets. There may even be occasions where the Legislature may wish to pass laws that direct MAC to undertake certain projects, or restrict its authority to undertake others. As noted earlier, the 1996 Legislature directed MAC to implement the 2010 Long Term Comprehensive Plan for the Minneapolis-St. Paul International Airport, but it also restricted MAC's ability to construct a third parallel runway at the airport and to replace that airport's existing passenger terminal.[50] Later in this chapter, we recommend lengthening the periods of public review prior to adoption of MAC's budget targets and final budget. We think this will help to ensure that airlines and other interested parties have sufficient time to examine MAC's budget assumptions and proposals. In fact, parties with a business or personal stake in the outcome of budget decisions will likely give MAC's budget a serious level of scrutiny—perhaps more so than the Legislature could provide.

Finally, we think that the Legislature should consider expanding the Metropolitan Council's existing statutory authority to annually approve MAC's capital projects.

---

49 Occasionally, the Legislature has reviewed (but not approved) the budgets of agencies that do not receive state appropriations—such as the State Fair and Iron Range Resources and Rehabilitation Board. We are aware of three states—Alaska, Hawaii, and Maryland—in which the state legislature approves a major airport's operating budget.

50 By law, MAC cannot construct a third parallel runway without the affected cities' approval. MAC cannot construct a replacement passenger terminal on the west side of the airport without legislative approval.

The law authorizes the council to *comment on* MAC projects exceeding $5 million at the Minneapolis-St. Paul Airport and and other MAC projects exceeding $2 million. However, the council's statutory authority to *approve* MAC's capital projects is limited to certain categories of projects specified in law that have "a significant effect on the orderly and economic development of the metropolitan area."

More external review of MAC's capital projects may be warranted.

For example, state law does not explicitly grant the Metropolitan Council authority to approve sound insulation projects at Minneapolis-St. Paul Airport—despite the council's threat in 2002 to withhold approval of MAC's entire capital budget unless MAC changed one of its sound insulation policies. In our view, projects related to the airport's sound insulation program are large, potentially controversial, and far-reaching in their impacts—and this could justify amending the law to require Metropolitan Council approval of such projects. Such approval could provide additional assurance that MAC's policies are prudent, practical, and consistent with previous commitments.

In addition, there have been other large capital projects—such as construction of the Humphrey Terminal—that have been subject only to council *review*, not council *approval*. If the Legislature wishes to increase external oversight of MAC's capital project decisions, it could specify in law additional categories of MAC projects that require Metropolitan Council approval, or it could require council approval of projects exceeding a certain dollar threshold.[51] It is unclear whether the Metropolitan Council would have the time and resources to scrutinize airport projects more closely than a commission (like MAC) that is focused solely on airport issues, but there might be value in requiring external *approval* of MAC's largest capital decisions by a body that already has statutory responsibility to *review* these projects.

RECOMMENDATION

The Legislature should consider amending Minn. Stat. (2002), §473.621, subd. 6 and 7, so that additional MAC capital projects would be subject to Metropolitan Council approval.

OPPORTUNITIES FOR PUBLIC INPUT AND REVIEW

The Metropolitan Airports Commission conducts its business at monthly public meetings.[52] Our study evaluated selected aspects of the commission's

51 The statutory dollar threshold that triggers Metropolitan Council review of capital projects has not changed in many years. If the Legislature were to require Metropolitan Council *approval* for capital projects exceeding a certain dollar threshold, it would probably make sense to select a threshold well above the ones that presently trigger council reviews.

52 In addition to the monthly meetings of the commission and its subcommittees, there are various groups that advise the commission and MAC staff on specific issues. An Airline Affairs Committee (chaired by Northwest Airlines) discusses various issues related to airport budgets, facilities, and operations. There are also advisory groups on taxis, noise, reliever airports, auto rental companies, and other airport issues.

decision-making processes. We observed various commission meetings during 2002, reviewed MAC meeting minutes, and solicited comments from the airlines that operate at Minneapolis-St. Paul International Airport. In the following sections, we discuss two areas in which there has been room to improve public participation in MAC decisions and public review of MAC's actions.

Public Information on MAC Meetings

We found that:

- **MAC's web site has provided insufficient information about MAC policies, and meeting notifications and summaries have not always been posted in a timely manner.**

Neither MAC's bylaws nor its ordinances are posted on the agency's web site. The bylaws set forth basic rules of procedure that the commission follows, and the ordinances are the policies that the commission has adopted on various airport issues. Although MAC provides the bylaws and ordinances to persons upon request, we think that posting these policies on the web site would improve public access to information about MAC and how it conducts its business.

MAC should post meeting materials on its web site in advance of the meetings.

The 15-member Metropolitan Airports Commission holds monthly meetings.

MAC's bylaws require that the executive director mail or hand deliver meeting notices to commissioners at least 48 hours in advance of a meeting. In practice, MAC staff usually mail notifications of commission meetings at least five days in advance of the meetings. Nevertheless, some parties interested in airport-related decisions expressed concern to us that they did not receive meeting agendas and information packets until two or three days before meetings. They said that this sometimes left little time to review MAC's materials and prepare comments for the public meeting.

Even if MAC maintains its present schedule for hard-copy mailings, we think that it could improve the timeliness of its public information by posting meeting materials online at the time it does these mailings. We observed that agendas for some MAC meetings during 2002 were not posted on the agency's web site prior to the meetings. Also, the web site has not been used to post the background materials that are included in packets mailed to MAC commissioners.

In addition, we observed that MAC meeting minutes have not always been posted in a timely manner. For instance, as of December 2002, the web site's most recently posted minutes for the monthly meetings of MAC's Maintenance and Operations Committee were from April 2002.[53] In our view, lengthy delays in posting meeting summaries weaken accountability by making it more difficult for the public to monitor MAC's activities.

RECOMMENDATIONS

MAC should post its bylaws and ordinances on the agency's web site. MAC should post agendas (and handouts as soon as they are available) for commission meetings on its web site no later than five days prior to the meeting date. In addition, MAC should post minutes of the commission and its committees within one week of their adoption.

MAC's Budget Process

A second area in which MAC could improve its decision-making process is the annual adoption of the agency's budget. Specifically, we found that:

- **MAC has set short timelines for making decisions about its budget targets and—until 2002—its final operating budget. This has restricted opportunities for input by the airlines and others.**

MAC provided more time for budget deliberations in 2002, but further improvements in the process are possible.

MAC policies call for the budget process to start in April of each year—with adoption of budget targets by MAC's Finance Committee.[54] Following several months of internal discussions, staff present budget recommendations to the commission (in September, according to MAC policies). MAC policies call for commission approval of the budget in October, although MAC officials told us that in recent years the commission has typically approved the budget in November or December. In 2002, the Legislature considered bills that would have required MAC to submit its proposed operating and capital budgets to key legislators at least 90 days prior to the commission's adoption.[55] Although these bills did not pass, MAC extended the period of time in Fall 2002 for deliberation of staff's budget recommendations. The commission received the budget recommendation in late September 2002 and adopted a budget in mid-December 2002—not the full 90 days that would have been required by the bills under consideration in the 2002 Legislature, but an improvement over some prior years. MAC officials told us that it would be feasible in future years to implement a 90-day period of public review prior to budget adoption.

The initial portion of MAC's budget process has considerably less opportunity for deliberation than the latter stages. Budget "targets" adopted by the commission in the spring set overall parameters for the recommendations that staff develop in subsequent months. Specifically, MAC adopts targets for operating income,

53 Postings for MAC's other committees and the full commission were usually more up-to-date.

54 MAC, *Administrative Manual*, Policy and Procedure Number 2001, "Attachment-Budget Schedule." In 2002, MAC's Finance Committee approved the budget targets in May, not April.

55 House File 3700 and Senate File 3420.

operating expenses, the debt service coverage ratio, and total airline costs. The targets can be modified later in the process, but they provide the framework that drives staff's initial recommendations regarding detailed budget allocations. Among other uses, the targets are intended to determine MAC's overall spending level—which, along with past capital investments, will determine the rates and charges paid by the airlines using Minneapolis-St. Paul International Airport. MAC staff told us that commissioners and the airlines typically have a very short period (a week or two) to review information on budget targets before the commission's Finance Committee acts on them.

The adoption of MAC's budget is a complicated, important task. Although the budget process has been open to public discussion and input, MAC's self-imposed time constraints have likely impeded a full discussion of the budget in past years. We think that MAC deserves credit for lengthening the period for public input on the draft budget in 2002, but we also think that MAC should make further improvements to ensure better opportunities for external review.

RECOMMENDATION

The Legislature should require in state law that MAC provide a preliminary annual budget to legislators and the general public 90 days prior to approval of the final budget by the commission. In addition, MAC should adopt internal policies to extend the time for consideration of annual budget targets in the spring.

MAC should seek input throughout the budget process.

Airline officials also told us that they would like to participate more directly in the budget development process with MAC—after budget targets have been set, and before staff present budget recommendations to the commission. We think that MAC should strive to have a budget development process that solicits comments at various stages from the airlines and other interested parties. Over the course of a multi-month budget process, economic conditions sometimes change and new issues arise—and MAC can benefit from input throughout this period. At the same time, it is important for MAC to share information in a fair way, with ample opportunities for input from the general public and affected parties and not just through a series of closed discussions. In addition, we think it is reasonable for MAC staff to retain control of the budget process until they present budget recommendations to the commission, and this may sometimes limit the staff's ability to provide budget information to the airlines or others.

Summary of Recommendations

- When contracts for retail, food, and beverage concessions expire at the end of 2003, the Metropolitan Airports Commission should consider increasing the percentage of gross sales paid as rent to a level more comparable with other large hub airports (p. 40).

- The Legislature should amend state law to require Senate confirmation of the Governor's appointees as MAC commissioners (p. 108).

- The Legislature should specify in state law the terms of all MAC members appointed by the Governor—that is, whether they serve at the pleasure of the Governor or for a specified term (p. 109).

- For the MAC members appointed to represent Metropolitan Council districts, the Legislature should specify in law how these members' terms and appointments will be affected by Metropolitan Council redistricting (p. 109).

- Legislative committees should periodically hold hearings on MAC—to discuss MAC's budget, performance, and other airport-related issues (p. 110).

- The Legislature should consider amending *Minn. Stat.* §473.621, subd. 6 and 7, so that additional MAC capital projects would be subject to Metropolitan Council approval (p. 111).

- MAC should post its bylaws and ordinances on the agency's web site. MAC should post agendas (and handouts as soon as they are available) for commission meetings on its web site no later than five days prior to the meeting date. In addition, MAC should post minutes of the commission and its committees within one week of their adoption (p. 113).

- The Legislature should require in state law that MAC provide a preliminary annual budget to legislators and the general public 90 days prior to approval of the final budget by the commission. In addition, MAC should adopt internal policies to extend the time for consideration of annual budget targets in the spring (p. 114).

Governance Options That Would Require Legislative Action

APPENDIX A

SENATE CONFIRMATION OF MAC COMMISSIONERS

Pro

- MAC policies can have significant impact on the state's travelers and businesses. Confirmation would give legislators and MAC appointees an opportunity to discuss priorities for the metropolitan airport system.
- Confirmation by a statewide body of elected officials might strengthen MAC's public accountability. Presently, MAC commissioners are each appointed by one elected official (13 by the Governor, 1 by the Minneapolis mayor, and 1 by the St. Paul mayor).
- Existing law authorizes the Senate to confirm commissioners of state agencies and the chair of one metropolitan agency (the Metropolitan Council). The Senate also confirms all members of a variety of state-created boards and commissions—ranging from highly visible governing bodies (for instance, the Minnesota Pollution Control Agency and the Minnesota State Colleges and Universities system) to less visible bodies (for example, the Minnesota Board of Invention and the Emergency Medical Services Regulatory Board). Arguably, MAC has statewide impact that is greater than that of some other boards whose members are confirmed by the Senate.

Con

- Partisan or single-issue politics could play a role in legislative confirmation decisions.
- Potential candidates for appointment may withdraw from consideration because of concerns about participating in a public confirmation process.
- It is unclear whether legislative confirmation would result in the selection of better MAC commissioners.

LEGISLATIVE APPROVAL OF MAC'S BUDGETS

Pro

- Approval of MAC's budget by elected officials could strengthen accountability. Presently, MAC's governing body of appointed (not elected) commissioners has sole responsibility for the agency's annual operating budget.
- Legislative approval would provide an additional opportunity for public debate about whether MAC's budgets are fiscally responsible and sufficiently responsive to the needs of airlines and other airport users.
- MAC is a creation of the state Legislature and should receive ongoing legislative oversight—even if it does not spend state funds for airport operations.

LEGISLATIVE APPROVAL OF MAC'S BUDGETS - Continued

Con

- MAC does not pay for its operations with state funds. Minnesota state budget officials recall no instances in which agencies without state funding have been required to obtain legislative approval of their capital or operating budgets. There have been some instances in which legislators have reviewed the budgets of agencies that do not receive state funding (for example, the state High School League and the Iron Range Resources and Rehabilitation Board).
- State law already authorizes annual external review of MAC's large capital projects by the Metropolitan Council.[1]
- Where appropriate, the Legislature can influence MAC budget decisions through state law, rather than through budget approvals. For instance, in the mid-1990s, the Legislature decided not to build a new airport and directed MAC to implement capital improvements at the existing airport.
- Legislative decisions on individual capital projects could be influenced by partisan or parochial concerns. This is one reason why the Legislature has historically given the Minnesota Department of Transportation considerable latitude to rank individual highway construction projects on the list of statewide priorities.[2]
- As an independent airport authority, MAC has considerable flexibility to adjust its budget on short notice—for instance, in response to acts of terrorism or changes in the airline industry. Airline and airport officials question whether a requirement for budget approval by a part-time Legislature could limit this flexibility or delay some projects.
- Except for transit operating subsidies that the Metropolitan Council receives, none of the Twin Cities metropolitan agencies have their budgets approved by the Legislature. (The Metropolitan Council's budgets are subject to review by the Legislative Commission on Metropolitan Government.)
- There are no fiscal analysts within the Minnesota Legislature presently assigned to review MAC's budget on a regular basis.
- With only a few exceptions, the budgets of major U.S. airports are not subject to legislative review.
- Federal restrictions on the use of airport revenues would limit the scope of the Legislature's budgeting authority.

---

1 Specifically, state law requires the Metropolitan Council to review projects at Minneapolis-St. Paul International Airport exceeding $5 million and other MAC capital projects exceeding $2 million. According to the law, "No such project that has a significant effect on the orderly and economic development of the metropolitan area may be commenced without the approval" of the council. See *Minn. Stat. (2002),* §473.621, subd. 6.

2 In 2000, however, the Legislature created the Major Transportation Projects Commission to review and comment on proposed, large-scale construction projects in which the department is involved.

LEGISLATIVE REVIEW OF MAC'S PLANS, POLICIES, AND PROGRAMS

Pro

- State law requires the Legislature to play a role in MAC's oversight. According to the law, "the [airports] commission shall be held accountable to the legislature in its activities, plans, policies, and programs. It shall report each session to appropriate committees of the legislature as to its activities, plans, policies, and programs."[3]
- There are standing committees of the House and Senate that would be suitable forums for discussion of MAC's performance and budget (e.g., House committees on local government and metropolitan affairs, transportation, and government operations; Senate committees on state and local government operations and transportation). The Legislative Commission on Metropolitan Government also might be a logical choice to oversee MAC's performance, but the scope of this commission's work would have to be amended in law to include more than oversight of the Metropolitan Council.[4]

Con

- In the years since the end of the dual track airport planning process, legislative committees have shown limited interest in MAC's budget and overall performance.

DESIGNATION OF MAC AS A STATE AGENCY (OR REQUIRING MAC TO BE SUBJECT TO SOME STATE AGENCY PROCEDURAL REQUIREMENTS)

Pro

- Making MAC a state agency would formally recognize that its actions have statewide significance, not just metropolitan significance.
- MAC would be subject to the same provisions that govern state agencies—in some cases, providing an additional level of scrutiny for MAC. For instance, the Commissioner of Administration would oversee MAC's purchasing and contracting processes, and MAC's rule development would likely be subject to the state's Administrative Procedures Act.

Con

- There would be numerous challenges in changing MAC from a semi-autonomous metropolitan agency into a state agency. For instance, MAC employees would be represented by different bargaining units than they are today, and they would be covered by state civil service laws. If MAC employees became state employees, their pensions would be in the Minnesota State Retirement System; presently, MAC pensions are in the Public Employees Retirement Association. In addition, the Legislature would have to consider whether to retain a commission to oversee the actions of the agency. Overall, changing MAC to a state agency would significantly disrupt an agency that has received generally good marks for its day-to-day airport management.

---

3 *Minn. Stat. (2002),* §473.621, subd. 1a.

4 *Minn. Stat. (2002)*, §3.8841.

DESIGNATION OF MAC AS A STATE AGENCY (OR REQUIRING MAC TO BE SUBJECT TO SOME STATE AGENCY PROCEDURAL REQUIREMENTS) - Continued

Con

- MAC would lose some of the flexibility it now has to manage the airport. Certain decisions would be subject to other agencies' review or procedures. This could slow the decision-making process or make the process less responsive to the needs of the airline industry.
- Presently, MAC bears considerable responsibility for whatever management problems it has—because its administrators have autonomy to manage airport affairs. If MAC's management decisions would be subject to review by state agencies (such as the departments of Employee Relations or Administration), it might be harder to pinpoint responsibility for airport management problems.
- The 1983 Legislative Commission on Metropolitan Governance concluded: "[Administrative Procedure Act (APA) rule-making] proceedings are not generally appropriate to the types of functions performed by metropolitan agencies."[5] It recommended application of APA only on a case-by-case basis, following careful consideration of the consequences. In addition, it is likely that rule-making under the APA process would take longer than the ordinance development process now administered by MAC.
- It is not necessary to make MAC a state agency to accomplish the goal of improved legislative oversight.

REQUIRE THE GOVERNOR'S APPOINTEES TO MAC TO SERVE "AT THE PLEASURE OF THE GOVERNOR"

Pro

- This change would give a new Governor more immediate control over the composition and direction of the commission. The incoming Governor could make all of his or her MAC appointments at one time, rather than staggering them over the course of a four-year term. This could make MAC more directly accountable to the Governor.
- The MAC chair and all members of the Metropolitan Council serve at the pleasure of the Governor, so there is some precedent for this practice among metropolitan agency appointees.
- There should be consistent provisions in law regarding the terms of Governor-appointed MAC commissioners. Presently, some of the commissioners have four-year terms, specified in law; others have no provisions and, thus, presumably serve at the pleasure of the Governor.

Con

- Such a change has the potential to result in the replacement of the entire commission at one time. This kind of turnover could result in a commission with limited understanding of previous commission actions. In addition, the Governor might have practical difficulties simultaneously filling 15 MAC positions with qualified people.

---

5 *Report of the Legislative Commission on Metropolitan Governance* (St. Paul, March 1983), 11.

REQUIRE THE GOVERNOR'S APPOINTEES TO MAC TO SERVE "AT THE PLEASURE OF THE GOVERNOR" - Continued

Con

- The state law that governs appointments to many boards and commissions (but not MAC) requires staggered timing of the appointments.[6]
- Authorizing removal of MAC commissioners "at the pleasure of the Governor" could reduce the commission's independence or subject its activities to political influences.

(NOTE: The terms of 8 of the 13 MAC commissioners appointed by the Governor are not specified in law. In practice, however, recent governors have appointed MAC commissioners on a staggered basis, with the understanding that all will serve four-year terms. Of the 13 gubernatorial appointees who served on MAC during 2002, the terms of 5 will end in 2003, 1 in 2004, 5 in 2005, and 2 in 2006.)

REDUCE THE SIZE OF THE COMMISSION

Pro

- Accountability is more diffuse in large governing boards than in smaller ones.
- At 15 members, the MAC commission is one of the larger commissions among airport authorities at major U.S. airports, and it is larger than the boards of some Minnesota agencies that deal with complicated issues. For instance, the Minnesota Pollution Control Agency has a nine-member board, and the Minnesota Public Utilities Commission has a five-member body. MAC's size is the third-largest of the five Twin Cities metropolitan commissions.[7]

Con

- Reducing the size of the commission might eliminate some of the geographic representation that has been built, by law, into its structure—for example, with commissioners representing outstate Minnesota, Metropolitan Council districts, and the cities of Minneapolis and St. Paul. It might also reduce representation on MAC by some of the many MAC constituencies (airlines, consumers, businesses, labor, general aviation, etc.).
- The MAC commission has several important committees (notably, the management and operations, planning and environment, and finance committees). A large commission enables MAC to divide the workload of these committees among more members.

---

6 Minn. Stat. (2002), §15.055, subd. 2.

7 The size of other governing bodies is: Metropolitan Council, 17; Metropolitan Mosquito Control District, 17; Metropolitan Parks and Open Space Commission, 9; Metropolitan Sports Facilities Commission, 7.

APPOINTMENT OF THE MAC EXECUTIVE DIRECTOR BY THE GOVERNOR—PERHAPS IN COMBINATION WITH ELIMINATION OF THE COMMISSION

Pro

- Presently, the MAC executive director serves at the pleasure of the MAC commission. If the Governor appointed MAC's administrative head, this person would be accountable to an elected official, rather than to a non-elected body. This approach is used at the Baltimore-Washington International Airport, where the Governor appoints both the director and the airport's governing body.[8] An example of such an arrangement in Minnesota is the Minnesota Pollution Control Agency, for which the Governor appoints both the commissioner and members of the governing board.[9]
- If the MAC commission was eliminated and the Governor appointed the MAC executive director, MAC would be accountable to the Governor through a single person (the executive director) rather than through 13 gubernatorial appointees.
- Most major state agencies in Minnesota do not have a governing board or commission. Even without the forum for public participation that a commission provides, these agencies deal with a variety of complex and often controversial public issues.

Con

- The MAC commission's authority to appoint the executive director is one of the commission's central responsibilities. Removing this authority would weaken the commission.
- MAC's independence could be weakened if the Governor appointed the executive director. For instance, staff priorities under a Governor-appointed executive director might be more partisan in nature.
- MAC's commission has provided a forum for public discussion of airport-related issues. Interested citizens can contact MAC commissioners with concerns, and commissioners are appointed to represent geographic areas. In addition, public meetings of the commission and its subcommittees offer interested persons an opportunity for input. All of the Twin Cities metropolitan agencies established by state law have a governing body, in addition to having a director.

8 Unlike the Minneapolis-St. Paul International Airport, a state (Maryland) owns Baltimore-Washington International Airport.

9 The MPCA commissioner serves as chair of the MPCA board.

INCREASE THE METROPOLITAN COUNCIL'S OVERSIGHT OF MAC—FOR EXAMPLE, BY INCREASING THE METROPOLITAN COUNCIL AUTHORITY TO APPROVE MAC BUDGET ITEMS, OR THROUGH DESIGNATION OF A METROPOLITAN COUNCIL MEMBER AS A MEMBER OF THE MAC COMMISSION

Pro

- Such changes would be potentially useful if there were concerns that MAC was not sufficiently responsive to the Metropolitan Council's plans and policies.
- State law now authorizes the Metropolitan Council to review MAC's large capital projects.[10] But the council only has authority to approve certain categories of projects specified in law. For example, the law presently does not explicitly designate sound mitigation projects as a category of projects that require council authorization—although the council threatened not to approve MAC's capital budget in 2002 because of concerns about MAC's sound insulation policy. MAC's capital budget is not subject to legislative approval, but requiring Metropolitan Council approval of additional categories of MAC capital projects would provide an external check on MAC's budget authority.
- Some Metropolitan Council officials told us that they thought that having a Metropolitan Council member on MAC would be constructive. (There is some precedent for such an arrangement: a Metropolitan Council member now serves as a voting member of the council's Transportation Advisory Board.)

Con

- Legislators and others expressed general concerns about MAC's accountability and oversight, but many seemed more interested in improved *state-level* oversight than in improved oversight by the Metropolitan Council.
- Some Metropolitan Council officials told us that the council has little capacity to conduct detailed reviews of MAC's operating budget. They think that this role can be performed better by the MAC commission, whose duties relate exclusively to airport issues.
- Metropolitan Council members serve part-time, and it would be demanding for a member to serve on both the Metropolitan Council and MAC.
- The MAC commission is already large (15 members) and represents varied constituencies (eight Metropolitan Council districts, four outstate cities with airports, and the cities of Minneapolis and St. Paul). Designating a Metropolitan Council member to serve on MAC would further complicate MAC's accountability and could result in a still-larger commission.

(Note: Presently, the Metropolitan Council designates one of its members to serve as a liaison to MAC. This person attends MAC meetings but does not vote on commission actions.)

---

10 Minn. Stat. (2002), §473.621, subd. 6 and 7.

REQUIRE IMPROVED PUBLIC NOTICE OF MAC COMMISSION VACANCIES AND TERM EXPIRATIONS; ESTABLISH A NOMINATIONS COMMITTEE TO IDENTIFY POTENTIAL MAC COMMISSIONER CANDIDATES

Pro

- The strength of a governing body depends considerably on the quality of its appointees. State law requires the Metropolitan Council and Metropolitan Parks and Open Space Commission to publish notices of vacancies and term expirations in general circulation newspapers in the metropolitan area and in the Metropolitan Council's districts.[11] In addition, these two agencies are also required by law to have committees to identify potential candidates for appointment.[12] There are no such requirements for MAC.

Con

- It is unclear whether the absence of these statutory requirements for MAC has had any impact on the quality of the persons appointed to MAC.

STATUTORY SPECIFICATION OF MINIMUM REQUIREMENTS FOR MAC APPOINTEES

Pro

- According to state law, Metropolitan Council members should be "knowledgeable about urban and metropolitan affairs."[13] In addition, they should reflect the "various demographic, political, and other interests in the metropolitan area and the districts."[14] State law does not define any minimum requirements for MAC commissioners.

Con

- Requirements of minimum qualifications would not guarantee that appointees will be any better qualified than they would be without such a provision.

PRESCRIBE THE AMOUNT OF ADVANCE NOTICE THAT MAC MUST PROVIDE FOR MEETINGS AND BUDGET DECISIONS

Pro

- Regarding meetings: Sometimes MAC has not provided the public with timely notification of its meeting agendas, including materials that will be discussed at the meetings. Although it might be difficult to send these items sooner through regular mail service, it would be possible to post them on the MAC website at the time of (or prior to) the mailing.

---

11 Minn. Stat. (2002), §473.123, subd. 3 (b); *Minn. Stat.* (2002), §473.303, subd. 2 (b).

12 Minn. Stat. (2002), §473.123, subd. 3 (c); *Minn. Stat.* (2002), §473.303, subd. 2 (c).

13 Minn. Stat. (2002), §473.123, subd. 2 (g).

14 Minn. Stat.(2002), §473.123, subd. 2 (f).

PRESCRIBE THE AMOUNT OF ADVANCE NOTICE THAT MAC MUST PROVIDE FOR MEETINGS AND BUDGET DECISIONS - Continued

Pro

- Regarding budgets: Before 2002, the amount of time that MAC commissioners and the public had to review staff's recommended budget was short. This prompted concerns from some airlines, legislators, MAC commissioners, and others. MAC staff told us that it would be feasible to have a 90-day budget review period following submission of the budget—which is slightly longer than the review period in 2002.

Con

- Regarding meetings: It would be unusual for the Legislature to specify in law exactly how and when an organization should provide advance notice of its meetings. It may be preferable for MAC to adopt internal policies regarding meeting notices.
- Regarding budgets: As an alternative to a statutory requirement for a 90-day budget review period, MAC could adopt internal policies that require such a period.

ELIMINATE PROVISIONS FOR MAYORAL APPOINTEES TO MAC

Pro

- Because the Minneapolis and St. Paul mayors are each authorized to appoint a MAC member, Minneapolis and St. Paul have more representation per capita on MAC than other parts of the region. (By law, the other eight MAC members from the metropolitan area are appointed from Metropolitan Council districts—with each district containing approximately equal population. The seven-county area covered by the Metropolitan Council includes the cities of Minneapolis and St. Paul.)

Con

- Many cities are affected by the operations of MAC airports, but Minneapolis and St. Paul are the two largest. Minneapolis residents have experienced much of the international airport's noise impacts. St. Paul is home to the reliever airport that has the most corporate jet traffic. MAC airports have substantial economic impact on both cities.

Members of the Metropolitan Airports Commission, December 2002

APPENDIX B

Charles Nichols, Chairman
Nancy Speer, Vice Chairman
Carl D'Aquila
Daniel Boivin
William Erhart
Tom Foley
Daniel Fortier
Coral Houle
Mike Landy
Dick Long
Robert Mars, Jr.
Bert McKasy
Paul Rehkamp
Paul Weske
John Williams

Further Reading

Airports Council International-North America. *The Next Stage in Noise Abatement Policy: ACI-NA's Plan for a Quieter Environment* (Washington, D.C., 2000).

Bureau of Governmental Research. *New Orleans International Airport: Governance, Regional Cooperation, and Airport Expansion* (New Orleans, June 1999).

Gesell, Lawrence E. *The Administration of Public Airports*, 4th ed. (Chandler, AZ: Coast Aire Publications, 1999).

Harper, Donald. "The Minneapolis-St. Paul Metropolitan Airports Commission," *Minnesota Law Review*, 55 (1971): 363-459.

HNTB Corporation. *Minneapolis-St. Paul International Airport: 14 CFR Part 150 Update* (Minneapolis: MAC, November 2001).

Hoerter, Sam. *Airport Management Primer*, 2nd ed. (Alexandria, VA: American Association of Airport Executives, 2001).

Metropolitan Airports Commission. *2001 Annual Report to the Legislature* (Minneapolis, April 2002).

_____. *2002 Operating Budget* (Minneapolis, undated).

_____. *Comprehensive Annual Financial Report, Year Ended December 31, 2001* (Minneapolis, May 2002).

_____. *MSP Noise Mitigation Program* (Minneapolis, November 1996).

Minnesota Planning. *Flight Plan: Airline Competition in Minnesota* (St. Paul, March 1999).

Office of the Legislative Auditor. *Metropolitan Airports Commission, Financial-Related Audit, January 1, 1999 Through December 31, 2001* (St. Paul, November 2002).

U.S. Department of Transportation. *Airport Business Practices and Their Impact on Airline Competition* (Washington, D.C., October 1999).

Wells, Alexander T. *Airport Planning and Management*, 4th ed. (New York: McGraw-Hill, 2000).

METROPOLITAN AIRPORTSCOMMISSION

Minneapolis-Saint Paul International Airport
6040 – 28th Avenue South • Minneapolis, MN 55450-2799
Phone (612) 726-8100 • Fax (612-726-5296)

Office of the Executive Director

January 14, 2003

Mr. James Nobles
Legislative Auditor
Office of the Legislative Auditor
Room 140 Centennial Building
658 Cedar Street
St. Paul, MN 55155-1603

Dear Mr. Nobles:

Thank you for taking the time and effort to conduct a thorough, objective audit of Metropolitan Airports Commission activities. It has been a pleasure to work with you and your staff during the last several months as this audit was conducted.

We are pleased the Legislative Auditor has recognized MAC's achievements in the following areas:

- The Commission's administration of Minneapolis-St. Paul International Airport is well regarded, and the airport's operating costs are low compared with other U.S. airports. Inflation-adjusted operating costs per passenger have not increased much since 1990.

- The MAC demonstrated more fiscal restraint than most other airports following the September 11, 2001 terrorist attacks. The MAC reduced its operating expenses more than most airports and cut its capital budget by 80 percent.

- The MAC has provided general financial relief to airlines and has taken steps to encourage air service competition.

- The noise mitigation program for MSP is one of the largest in the nation and is consistent with policies set by the MAC and the Legislature. The scope of the MAC's proposed noise program expansion would be unprecedented among major airports.

- Concession sales per passenger at MSP are above the industry average.

We do have one comment on the finding related to the Commission's preliminary 2003 budget proposal: we believe that the initial proposal was justified considering budgetary reductions in 2002 and the significant expansion of MSP facilities. In 2002, MAC opened two new Lindbergh Terminal concourses (A and B), the second phase expansion

of Concourse C, a new, eight-story parking ramp at the Humphrey Terminal, and new cargo facilities. We finished work on numerous airfield projects and operated the new Humphrey Terminal for the full calendar year. We agree that we should have provided a more detailed explanation of the proposed cost impacts of this expansion.

Also, each year's initial budgetary proposal is intended as a starting point for discussions among Commissioners, tenants and the public. Based on that discussion, the preliminary budget is adjusted as appropriate. Given the industry's continuing economic challenges, Commissioners ultimately reduced the proposed budget by more than $7.1 million and kept budgeted airline rates and charges at 2002 levels. Despite the substantial increase in facilities, 2003 staffing also is being held to 2002 levels.

Finally, I want to respond to specific recommendations in your report:

- The MAC will modify future budget preparation schedules to allow more time for public consideration of budget targets before Commissioners vote on them. Future budgets will provide more detailed explanations of increases in operating expenses.

- The MAC will provide more complete and timely information regarding public meetings and Commission policies on its web site.

- The MAC has increased percentage revenues from food, beverage and retail sales in its more recent concessions contracts, with Anton Air Foods and PCBR. Our contract with HMS Host expires at the end of 2003, providing an opportunity to seek increased revenues from that space as well. The Commission has already begun deliberations concerning the future of its concession program. Commissioners will solicit public input into the goals and objectives that will guide future concessions development.

- The MAC welcomes the opportunity to work with the governor and state legislators on issues of governance and oversight. MAC officials have frequent contact with state lawmakers and will be happy to provide additional testimony and information upon request.

In closing, I want to express my appreciation for the fairness, thoroughness and professionalism exhibited by the Legislative Auditor's Office staff in developing this report. The Metropolitan Airports Commission will certainly take your recommendations to heart and will respond accordingly.

Sincerely,

/s/Jeffrey Hamiel

Jeffrey Hamiel
Executive Director
Metropolitan Airports Commission

Recent Program Evaluations

Residential Facilities for Juvenile Offenders, February 1995 95-01
Health Care Administrative Costs, February 1995 95-02
Guardians Ad Litem, February 1995 95-03
Early Retirement Incentives, March 1995 95-04
State Employee Training: A Best Practices Review, April 1995 95-05
Snow and Ice Control: A Best Practices Review, May 1995 95-06
Pollution Control Agency's Use of Administrative Penalty Orders, Update July 1995 95-07
Development and Use of the 1994 Agency Performance Reports, July 1995 PR95-22
State Agency Use of Customer Satisfaction Surveys, October 1995 PR95-23
Funding for Probation Services, January 1996 96-01
Department of Human Rights, January 1996 96-02
Trends in State and Local Government Spending, February 1996 96-03
State Grant and Loan Programs for Businesses February 1996 96-04
Post-Secondary Enrollment Options Program, March 1996 96-05
Tax Increment Financing, March 1996 96-06
Property Assessments: Structure and Appeals, A Best Practices Review, May 1996 96-07
Recidivism of Adult Felons, January 1997 97-01
Nursing Home Rates in the Upper Midwest, January 1997 97-02
Special Education, January 1997 97-03
Ethanol Programs, February 1997 97-04
Statewide Systems Project, February 1997 97-05
Highway Spending, March 1997 97-06
Non-Felony Prosecution, A Best Practices Review, April 1997 97-07
Social Service Mandates Reform, July 1997 97-08
Child Protective Services, January 1998 98-01
Remedial Education, January 1998 98-02
Transit Services, February 1998 98-03
State Building Maintenance, February 1998 98-04
School Trust Land, March 1998 98-05
9-1-1 Dispatching: A Best Practices Review, March 1998 98-06
Minnesota State High School League, June 1998 98-07
State Building Code, January 1999 99-01
Juvenile Out-of-Home Placement, January 1999 99-02
Metropolitan Mosquito Control District, January 1999 99-03
Animal Feedlot Regulation, January 1999 99-04
Occupational Regulation, February 1999 99-05
Directory of Regulated Occupations in Minnesota, February 1999 99-05b
Counties' Use of Administrative Penalties for Violations of Solid and Hazardous Waste Ordinances, February 1999 99-06
Fire Services: A Best Practices Review, April 1999 99-07
State Mandates on Local Governments, January 2000 00-01
State Park Management, January 2000 00-02
Welfare Reform, January 2000 00-03
School District Finances, February 2000 00-04
State Employee Compensation, February 2000 00-05
Preventive Maintenance for Local Government Buildings: A Best Practices Review, April 2000 00-06
The MnSCU Merger, August 2000 00-07
Early Childhood Education Programs, January 2001 01-01
District Courts, January 2001 01-02
Affordable Housing, January 2001 01-03
Insurance for Behavioral Health Care, February 2001 01-04
Chronic Offenders, February 2001 01-05
State Archaeologist, April 2001 01-06
Recycling and Waste Reduction, January 2002 02-01
Minnesota Pollution Control Agency Funding, January 2002 02-02
Water Quality: Permitting and Compliance Monitoring, January 2002 02-03
Financing Unemployment Insurance, January 2002 02-04
Economic Status of Welfare Recipients, January 2002 02-05
State Employee Health Insurance, February 2002 02-06
Teacher Recruitment and Retention: Summary of Major Studies, March 2002 02-07
Local E-Government: A Best Practices Review, April 2002 02-08
Managing Local Government Computer Systems: A Best Practices Review, April 2002 02-09
State-Funded Trails for Motorized Recreation, January 2003 03-01
Professional/Technical Contracting, January 2003 03-02
MinnesotaCare, January 2003 03-03
Metropolitan Airports Commission, January 2003 03-04
Preserving Housing: A Best Practices Review, April 2003 03-05

Evaluation reports can be obtained free of charge from the Legislative Auditor's Office, Program Evaluation Division, Room 140, 658 Cedar Street, Saint Paul, Minnesota 55155, 651/296-4708. Full text versions of recent reports are also available at the OLA web site: http://www.auditor.leg.state.mn.us