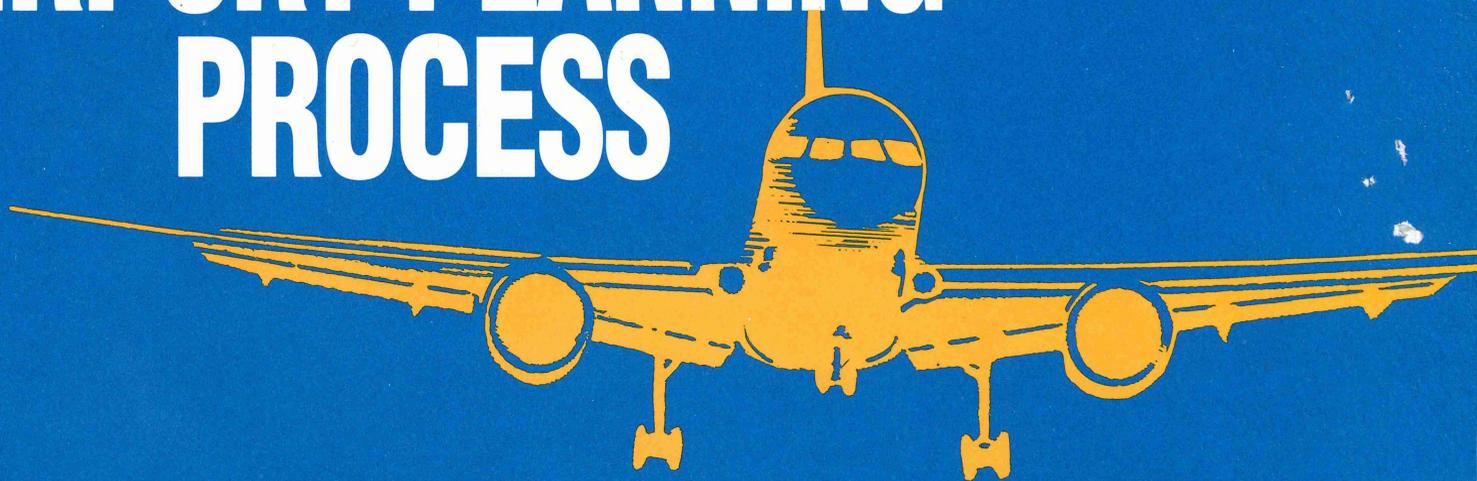


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# DUAL TRACK

# AIRPORT PLANNING PROCESS



Metropolitan Airports Commission

*August 1992*



# DUAL TRACK AIRPORT PLANNING PROCESS

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## DESCRIPTION

A Dual Track Airport Planning Process - designed to preserve the region's future major airport options - was established by the Minnesota Legislature's Metropolitan Airport Planning Act of 1989. The process is being conducted by the Metropolitan Airports Commission (MAC) and the Metropolitan Council.

The planning process was begun because separate studies conducted by MAC and the Metropolitan Council have shown that additional airport capacity is needed in the future to meet the long-term aviation needs of the region.

One track addresses ways to provide the needed capacity and facilities at Minneapolis-St. Paul (MSP) International Airport. The other track provides the needed capacity and facilities at a potential replacement airport.

The Airport Planning Act requires MAC and the Metropolitan Council to make a recommendation to the Legislature in 1996. While the MAC and Council have been working to expedite the process to limit the period of uncertainty as to which airport development track will be followed, the level and timing of analysis required will make it difficult to complete the work prior to 1996.



## 1989 METROPOLITAN AIRPORT PLANNING ACT

In 1989, the Minnesota Legislature enacted airport planning legislation which includes the following provisions:

### *Aviation Plan*

By Feb. 1, 1990, the Metropolitan Council shall amend its aviation plan to include alternatives for major airport development in the metropolitan area for the next 30 years. The alternatives must include both airport improvements and enhancements of capacity at the existing airport and the location and development of a new major airport.

### *Search Area*

By Jan. 1, 1992, the Metropolitan Council shall designate a search area for a new major airport.

### *MSP Plan*

By Jan. 1, 1992 (as amended), the Metropolitan Airports Commission shall adopt a long-term comprehensive plan for MSP International Airport at its existing location to satisfy the air transportation needs for a 30-year planning period.

### *New Airport Site Selection and Comprehensive Plan*

Within four years after the designation of the search area, the MAC shall:

- select a site for a new major airport within the search area;

- prepare a comprehensive plan for the development of a new major airport at the selected site to satisfy the air transportation needs for a 30-year period; and

- prepare and submit for administrative review the environmental documents required for site acquisition.

### *Airport Planning and Development Report (Airport Decision Document)*

Within 180 days following completion of the comprehensive plans for MSP and a new major airport, the Metropolitan Council and MAC shall report to the legislature on the long-range planning and development of major airport facilities in the metropolitan area. The report must include recommendations of the agencies on major airport development for the 30-year period and on acquiring a site for a new major airport, including financing. The report must be completed by July 1996.

## COMPLETED DUAL TRACK AIRPORT PLANNING ACTIVITIES

### *Aviation Plan*

In January 1990, the Metropolitan Council amended its Aviation Development Guide to include the air transportation needs to the year 2020 and the Dual Track Major Airport Planning Strategy to meet those needs.

### *Search Area Designation*

In December 1991, the Metropolitan Council designated the Dakota Search Area in Dakota County for the planning and development of a new major airport. The Dakota Search Area measures 17 miles east to west and eight miles north to south and encompasses about 115 square miles or 74,600 acres.

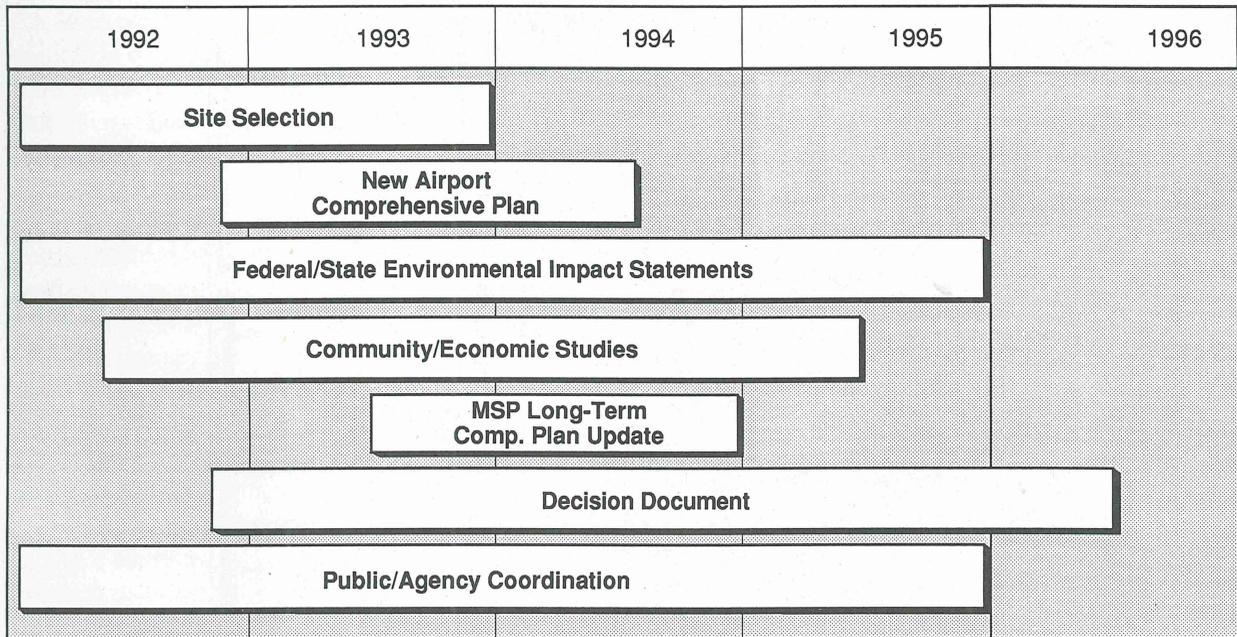
The process utilized by the Council in designating the search area was approved by the Minnesota Environmental Quality Board on Oct. 18, 1990, as an alternative environmental review process - and was reviewed by the FAA and determined consistent with FAA policies and regulations on Dec. 26, 1990.

### *MSP Long-Term Comprehensive Plan*

In November 1991, the Metropolitan Airports Commission adopted a Long-Term Comprehensive Plan for Minneapolis-St. Paul International Airport, incorporating a new 8,000-foot north-south runway and a new passenger terminal on the west side of the airport.



## PROPOSED SCHEDULE FOR 1992 – 1996



### FAA AIRPORT CAPACITY DESIGN TEAM STUDY FOR MSP

The Federal Aviation Administration (FAA) is conducting an Airport Capacity Design Team Study for Minneapolis-St. Paul International Airport. The study began in July 1992 and is expected to be completed before the end of 1993.

The purpose of the MSP study is to identify potential projects to increase the airport's runway and taxiway capacity, and to quantify the potential benefits of these projects for future operations.

Through this technical analysis, the FAA will be looking at what the existing airport can

handle and what kind of capacity improvements could be made. The study will not examine environmental, political or airspace issues.

The FAA has conducted, or is in the process of conducting, Capacity Design Studies of all the major airports throughout the United States.

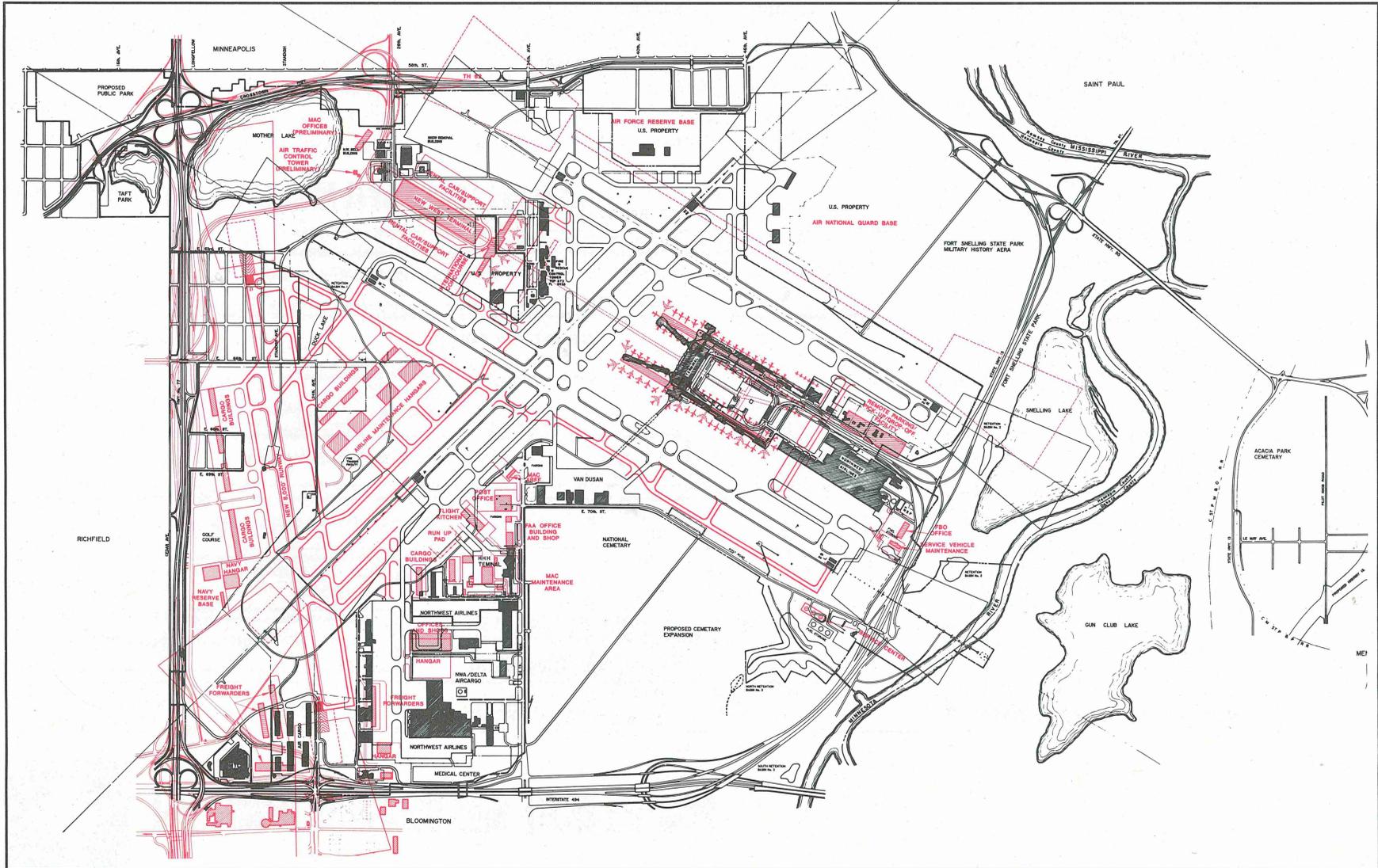
The MSP Capacity Design Team includes FAA representatives from air traffic control, flight standards, and the Airport Capacity Office. The Team also includes airport tenants (airlines, military), and representatives from local and state

agencies (MAC, Metropolitan Council, MnDOT). The Team is chaired by the FAA Airport Capacity Program Manager.

The study will review information from the Long-Term Comprehensive Plan (LTCP) for MSP, as well as evaluate additional proposals. The timing of the FAA study will enable data and results from the capacity study to be considered in the LTCP update, which will occur in 1993-94.



# RECOMMENDED MSP COMPREHENSIVE PLAN





## MSP LONG-TERM COMPREHENSIVE PLAN

The Metropolitan Airports Commission was required to develop and adopt a Long-Term Comprehensive Plan (LTCP) for Minneapolis-St. Paul International Airport by Jan. 1, 1992.

The LTCP for MSP International Airport is intended to provide a development plan for 2010 and a conceptual plan for the year 2020. The Plan, as directed by the Minnesota Legislature, is based on the assumption that MSP would continue to be the region's major airport.

The primary goal of the LTCP is to determine the projected aviation activity and passenger levels for MSP, assess the extent of facilities required to meet this activity, and investigate airfield and terminal alternatives to meet these needs. In addition to functional and operational issues, the LTCP addresses the compatibility of the airport with its urban environment.

During the 1990-91 timeframe, a series of runway and terminal options was considered. These options were screened to the best three runway alternatives, including a north parallel runway, a south parallel runway, and a north-south runway. Two terminal alternatives, including an additional east terminal and a replacement west terminal were evaluated.

Following a detailed analysis, a final "consolidated" airfield/terminal alternative was selected in November 1991 as the MSP Long-Term Comprehensive Plan. The LTCP includes a new 8000-foot north-south runway (actual orientation is north northwest-south southeast) which would

be located on the west side of the airport. This runway would be used predominantly for takeoffs to the south and landings from the south.

A replacement west terminal complex would be developed on the west side of the airport for all airlines. The new passenger terminal would accommodate terminal functions for all the airlines serving MSP, including domestic, international and regional carriers. Most of the aircraft gates would remain on the east side of the airport, connected to the west terminal via an underground people-mover system. A concourse for international flights would be located adjacent to the new terminal.

Automobile parking facilities would be constructed on top of the new west terminal to minimize passenger walking distances. A new roadway system would be developed to provide access to the west terminal via interchanges on the Crosstown Highway and Cedar Avenue.

On the east side of the airport, terminal and parking facilities would be removed from the area between the Gold and Green Concourses and replaced with aircraft parking gates. A remote parking/pickup/drop-off facility would be developed using the existing airport entrance road, providing access to the airport from both the east and west.

## CONTINUING ANALYSIS AND UPDATE

Because of the dynamic nature of the airline industry and the national/regional economy, and as required by the Metropolitan Airport Planning Act, the socio-economic and aviation assumptions utilized in the original LTCP forecast of airport demand for the year 2020 will be reviewed during 1993 and revised as necessary.

The updated 2020 forecasts will be used for both the New Airport Comprehensive Plan and the MSP LTCP update so that these plans are directly comparable.

The facility requirements and alternative concepts previously analyzed for MSP will be updated and reassessed based on the revised forecasts. In addition, more detailed work on the roadway improvements needed to serve MSP in 2020 will be undertaken. Based on this re-assessment, the LTCP will be updated and a revised 2010 Development Plan and 2020 Conceptual Plan will be prepared.





## DESCRIPTION OF DAKOTA SEARCH AREA

In December 1991, the Metropolitan Council designated the Dakota Search Area as the general area within which a potential new major airport for the Twin Cities will be located, if a decision is made to build a new airport. The designation culminates a comprehensive two-year process to find the best location for a possible new major airport.

The Dakota Search Area is 115 square miles in size. It includes the cities of Coates and Vermillion, and Empire and Vermillion Townships, as well as parts of the city of Rosemount, and Nininger and Marshan Townships.

The search area was chosen by a Council task force, following a two-year examination of possible search areas in the 14-county greater metropolitan region. The task force had narrowed the search

areas to three at the beginning of 1991 and conducted a detailed analysis of each.

According to the Metropolitan Council, the Dakota Search Area was found to be the most suitable, primarily because it has favorable access to the Twin Cities area population, has the fewest environmental constraints, and has the most compatible land-use of the areas studied.

Here's how the Dakota Search Area compared to the other search areas:

- 92 percent of the seven-county Metro Area's population and 96 percent of its employees could reach the Dakota Search Area within an hour, compared to 78 and 88 percent for the Dakota-Scott Search Area and 59 and 62 percent for Anoka-Isanti-Chisago.

- It has the fewest wetlands - 3 percent of its land area, compared to 11 percent for Dakota-Scott and 25 percent for Anoka-Isanti-Chisago. It also has few known endangered plant and animal communities, and the least floodplain constraints.

- Both the Dakota and Dakota-Scott areas have extensive farmland (89 and 84 percent of their land area, respectively), though the Dakota-Scott farmland is more productive.

- Although each search area has adequate land requirements for a major airport, the Anoka-Isanti-Chisago area is the least flexible because of the environmental constraints. Airspace constraints pose only minor issues in all three areas.



## NEW AIRPORT SITE SELECTION STUDY

In January 1992, the MAC initiated a site selection study to locate an airport in the Dakota Search Area. Early on in this process, it was decided to conduct the site selection in three phases:

- 1) Site Identification
- 2) Site Screening
- 3) Site Selection

The first phase of the process will include the identification of potential sites within the Dakota Search Area. The following set of criteria, which was developed with the Site Selection Technical Advisory Committee and will be reviewed with the public, will be used to identify potential sites:

- Airport runways, taxiways, other facilities and Federal Runway Protection Zones (RPZs) must be contained within the Search Area.
- State Safety Zones A and B and the LDN 65 noise contour may not impact existing urbanized areas outside the Search Area.
- The runway layout must maintain the full operational capability of the "conceptual" layout. Alternative runway configurations to achieve this capability will be evaluated during the site selection process.
- No airport facilities may be placed in areas of extensive wetlands.
- No site may be considered which would result in ground facilities (terminal, airline maintenance, cargo, areas of concentrated runways/taxi-

ways) located in floodways.

- Physical features or structures not compatible with aircraft overflight, due to their height or other considerations, will be avoided.

During the site identification phase, a potential site will include a specific land area within a site boundary and a specific runway configuration.

Once the potential sites have been identified, the second phase of the site selection process will begin. In this phase, the potential sites will be screened, using a broader range of criteria that will include operational, environmental, and geographic criteria, to yield the final "candidate" sites.

The final phase of the site selection process will involve a detailed evaluation of the candidate sites. This evaluation will include the most extensive criteria in the overall site selection process, including specific factors to measure the operational, environmental, geographic, economic, and cost aspects of the alternatives. A final site will be selected based on this detailed evaluation.

## NEW AIRPORT COMPREHENSIVE PLAN

The Metropolitan Airports Commission will prepare a detailed comprehensive plan for the recommended new airport site. The plan will address the needed airport facilities for the 30-year planning period, based on updated forecasts of activity developed during 1993. Alternative concepts will be studied that meet these facility requirements.

The various new airport alternatives will be evaluated in detail, and a recommended comprehensive plan will then be selected. This plan will include detailed locations of runways, taxiways, terminal facilities, airline maintenance areas, cargo facilities and other airport facilities.

Costs of airport facilities, and associated infrastructure improvements, will be developed.

The resulting plan will be similar in detail to the MSP Long-Term Comprehensive Plan, to allow for comparison of the two options.



## ENVIRONMENTAL REVIEW PROCESS

An environmental review process has been initiated along with the site selection study for a new airport in the Dakota Search Area and the MSP Long-Term Comprehensive Plan. The process, which was approved by the Minnesota Environmental Quality Board (EQB) and the Federal Aviation Administration (FAA), is being co-sponsored by the FAA and the Metropolitan Airports Commission.

The federal and state environmental documents will include extensive analysis of new airport site alternatives, new airport development alternatives, existing airport development alternatives, and the "no-action" alternative.

The analysis will include a detailed evaluation of social and economic impacts on the affected governmental units and the impacts on the natural environment, and will also include an extensive economic analysis of airport alternatives by the Metropolitan Council.

The first step in the environmental process was to conduct a scoping process. This included preparing a scoping report outlining proposed project activities, focusing on environmental aspects.

The first phase scoping report on the Dual Track Airport Planning Activities for 1992-1996 was published in March 1992. Three scoping meetings were conducted in April to solicit input from federal and state agencies and the public.

Additional scoping meetings and reports will be developed at key decision points throughout the process.

At the request of the MAC, the Minnesota EQB will assume responsibility for determining adequacy on the final state environmental impact statement (EIS) for the Dual Track Planning Process. The EIS will compare the selected new airport site and plan, the selected existing airport development plan, and the "no-build" alternative.

MAC continues to work closely with the FAA on the federal environmental review process and with the EQB on the state process.

### DNR BIOLOGICAL SURVEY

The Minnesota Department of Natural Resources (DNR) is conducting a Biological Survey in the Dakota Search Area. Under an agreement with the Metropolitan Airports Commission, this study is being done earlier than originally programmed by the DNR.

The survey began in mid-1992 and focuses on rare, threatened, or endangered species of plants and animals and biotic communities.

The DNR's multi-level survey technique consists of three steps: The first step is to interpret aerial photography, used to identify potential natural habitat in the area. This is followed by low-altitude aircraft evaluation to determine which sites have escaped significant human alteration.

The final step includes intensive ground surveys of selected high-quality natural area sites. On these natural sites, field biologists and ecologists document the occurrence and condition of rare plants, animals and biotic communities.

Final products of the 1992 field survey of the Search Area will consist of a computer generated map of all rare ecological features recorded historically and during the 1992 survey, a digital file of the same mapped data, and computer-generated abstracts describing the specific occurrences of each of the rare feature locations.

Preliminary data from the survey will be available in the fall of 1992, and will be used for screening potential sites in the Dakota Search Area. During 1993, the completed documentation from the field survey in Dakota County will be available for use in the final site selection.

### MSP RE-USE STUDY

As part of the Metropolitan Airport Planning Act, the legislature directed the Metropolitan Council to develop policies for the potential re-use of Minneapolis-St. Paul International Airport if the decision is made to move to a new airport. This study is to be completed by Jan. 1, 1993.

A MSP Re-Use Task Force, appointed by the Metropolitan Council in October 1991, has been studying the issue. The Task Force has established criteria to guide plans for redeveloping the site, and has formulated alternative re-use scenarios that would meet these criteria.

The performance criteria define the essential characteristics and priorities for any redevelopment strategy and include physical, cultural, historic and environmental considerations.



## DUAL TRACK DECISION DOCUMENT

The Decision Document will recommend to the Legislature a long-term aviation strategy for the Twin Cities and lay out the key data, analysis and reasons for the recommendations. The report is required to be jointly prepared by the MAC and Metropolitan Council. Completion of the report is required by state law within 180 days after the completion of the comprehensive plans for MSP and a new major airport.

To date, seven decision factors have been identified as important for making choices among the options - expand MSP, build a new airport, or do nothing. These factors are as follows:

- **Investment Assessment** - The key issues for major airport investment decisions involve how effective and flexible an option is in meeting the future capacity objectives, the relationship between costs and benefits, and the relative risks of making investments too soon or too late.

- **Air Service Quality** - The airport facilities and services should enhance and maintain the Twin Cities as a major hub airport in the national system, maintain and increase the frequency of service and nonstop access to major national and regional markets, promote and facilitate the expansion of direct international service, and promote air cargo goods movement to regional, national and international markets.

- **Regional Economic Impacts** - Air service plays an important role in fostering regional economic development. The key economic questions are what airport investments will do in the

short term, over the long term and how they will affect regional economic growth and development patterns.

- **Regional and Community Impacts** - The key issues here are how the airport options impact people, communities and regional and use and development patterns. Airport operations and related infrastructure need to be considered in evaluating the options.

- **Environmental Effects** - Airport development and operation, whether at the existing airport or at a new site, will have environmental impacts which will need to be addressed. These impacts include both on- and off-site and will effect the natural and man-made environments.

- **Financial Issues** - The key financial issues address project feasibility and the ability of the public and the airlines/airport users to cover annual debt and operating costs.

- **Regional Strategic Concerns** - The viability of the aviation strategy may critically depend on its ability to adapt to change and unforeseen events. The aviation plan will succeed only if it is implemented in a form that satisfies future needs.

### REGIONAL/COMMUNITY AND ECONOMIC STUDIES

As part of the Dual Track Airport Planning Process, the economic, regional and community impacts associated with building and operating a

new airport, expanding MSP, or adopting a “no build” approach will be studied. Initially, the studies will address the regional and community impacts associated with possible sites for the new airport, and with MSP alternatives.

The second phase of the regional/community and economic studies will provide detailed and comprehensive analysis concerning regional and individual community impacts of constructing and operating the new airport, expanding MSP, or adopting the “no build” option. Where adverse consequences are anticipated, mitigation measures will be developed.

The study will describe how changes in land use and development around MSP or the new airport will impact the comprehensive plans of communities in the airport vicinity, and the region as a whole. Associated commercial and residential development pressures will be identified. The changes in demand for public services will be analyzed, together with measures to mitigate any adverse impacts upon local communities.

A thorough analysis of the resulting direct, indirect, and induced economic impacts resulting from the new airport, expanded MSP, and the “no build” options will also be developed at the local community level as well as at the regional level.

The work will be incorporated in the federal and state environmental documents. The Metropolitan Council will play a key role in these studies.



## AGENCY AND PUBLIC COORDINATION

Throughout the Dual Track Airport Planning Process, there has been a major emphasis on public and agency involvement before, during, and after the completion of key study components.

Affected local, state and federal agencies have been contacted to determine the type and location of resources within their jurisdiction in the vicinity of MSP and in the new airport search area, and to identify potential issues and concerns. Direct coordination with review agencies has been maintained throughout the process to ensure that impacts and concerns are adequately addressed.

In addition to these agencies, the following groups/committees are involved in the process:

- **State Advisory Council.** The State Advisory Council was established by the legislature to provide a forum at the state level for education, discussion and advice to the legislature on metropolitan airport planning. The Council has 23 members consisting of House and Senate legislators, federal, state and metropolitan agencies, representatives of the aviation industry and members of the public residing within and outside the metropolitan area.

- **Contingency Planning Group.** This group monitors trends in technology, travel habits and the economy, and makes an annual assessment of the need to proceed with any major improvements at the current airport or to acquire or develop a new major airport. The Contingency Planning Group is comprised of Metropolitan Council and MAC members, local officials and business representatives.

- **Interagency Committee.** This is a joint committee of MAC and Metropolitan Council board members mandated by the legislature to oversee the Dual Track Planning Process.

- **MSP Airport Task Force.** This committee advised the MAC on policy issues and technical completeness during the development of the Long Term Comprehensive Plan for MSP. The broad-based group included community representatives, airport users, the business community, the MAC, the Metropolitan Council, and various federal, state, and local agencies. The task force will be reconvened during the LTCP update.

- **Site Selection Task Force.** This committee will advise the MAC on the planning process and policy issues during the site selection study. Membership will include representatives of federal, state and local agencies, elected officials and representatives of the business community and airport users. Membership on the task force will be changed after the completion of the site selection study to address the comprehensive plan for the new airport.

- **MSP Interactive Planning Group.** The MSP Interactive Group (IPG) was formed to obtain technical input from the communities adjacent to MSP during the development of the Long Term Comprehensive Plan. The group's main focus was to identify community impacts resulting from the development of the various MSP alternatives, and to suggest mitigation strategies. The IPG will be reconvened during the update of the MSP plan in 1993.

- **Site Selection Technical Advisory Committee.** This committee reviews technical studies and documents, and provides input into the studies. Membership includes representatives of affected state/federal transportation, planning and environmental agencies, local government staff and aviation industry representatives. Membership of the Technical Advisory Committee will be changed after the completion of the site selection study to address the comprehensive plan for the new airport.

- **MSP Re-Use Task Force.** This task force is studying the potential re-use of Minneapolis-St. Paul International Airport. This group is made up of people who represent a broad range of regional interests, including communities surrounding the airport, business, labor and housing interests, MAC and Metropolitan Council members.

The general public is being kept informed of the Dual Track Airport Planning Process through a series of public information meetings, newsletters, press conferences and news releases. The public will also have opportunities throughout the process to comment both informally and formally.

Formal input will be solicited at public hearings. Informal input from the public can be provided at the scoping meetings, meetings of the advisory groups, and at public meetings which will be scheduled throughout the process, including meetings before each hearing, and at key points in the process. Additional advisory groups will be formed as necessary.



## APPENDIX

### Metropolitan Airports Commission

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