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DUAL TRACK AIRPORT PLANNING ACTIVITIES

1992 ANNUAL REPORT TO THE LEGISLATURE

METROPOLITAN AIRPORTS COMMISSION

February 1993

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Pursuant to Mn Stat 473.616, sd 4

Purpose and Objective

The Rochester Airport Study was initiated in order to determine whether it would be feasible to divert segments of aviation activity from Minneapolis-St. Paul International Airport to the Rochester Airport, thereby making additional capacity available at MSP. The study has focussed on the following areas for diversion: general aviation, military activity, cargo activity, and the broad range of passenger activity including international, regional, connecting and origin-destination. If any of these options are feasible, they could assist in prolonging the viability of MSP.

Status and Results

The work effort related to the study was initiated during 1992, with much of the analytical work completed prior to the end of the year. The initial work focussed on defining the scenarios that would be evaluated during the course of the study. A preliminary screening was then completed in order to identify those options which held the most promise. It was determined that the areas of military activity and cargo would be most readily transferred from MSP to RST, and additional work was focussed in those areas. Followon discussions with representatives from Rochester indicated a desire to review the feasibility of developing a mini-hub at RST rather than the options reviewed to date. Additional work is proceeding in this area.

Dual Track Airport Planning Activities

1992 Annual Report to the Legislature

Metropolitan Airports Commission

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Introduction

The 1989 Metropolitan Airport Planning Act requires that the Metropolitan Airports Commission report to the Legislature by February 15 of each year on its airport planning activities for the preceding year, and its anticipated activity for the upcoming year.

For 1992, the following activities are discussed:

- February 15, 1992 Report to Legislature
- Minneapolis-Saint Paul International Airport Long-Term Comprehensive Plan continuing analysis
- Site selection study for a new airport within the Search Area identified by the Metropolitan Council
- Initiation of FAA Capacity Task Force for MSP
- Initiation of Dual Track Forecast Update
- Development of Alternative Environmental Process for Dual Track Process
- Initiation of Environmental Scoping Process for the Dual Track Process
- Community and agency coordination
- DNR Biological Survey of Search Area

For 1993, the following anticipated activities are discussed:

- Completion of technical work on New Airport Site Selection Study
- Initiation of comprehensive airport development plan for selected site
- Continue environmental documentation associated with Site Selection Study

- Initiate update of Minneapolis-Saint Paul International Airport Long-Term Comprehensive Plan
- Completion of FAA Capacity Task Force for MSP
- Completion of Forecast Update
- Community and agency coordination

Total costs for the Dual Track planning activities are provided for 1992 and 1993 at the end of the report.

Work Completed in 1992

Purpose and Objective

During February 1992, a report to the Legislature similar to this document was prepared and submitted. The report described on-going 1991 work and anticipated 1992 work. The report summarized progress on the following initiatives:

- Report on MSP Long-Term Comprehensive Plan
- Report on Dual Track Airport Planning Process Work Scope for 1992-1996
- Report on initiation during 1993 of site selection study for new airport within the Search Area identified by the Metropolitan Council

Status and Results

The 1991 report was submitted to the Legislature on February 15, 1992.

Purpose and Objectives

In 1992 the process to update the airport activity forecasts originally prepared in 1989 for use in the Dual Track Airport Planning Process was initiated. The update will use the latest historical information, current airline growth plans, and updated regional socioeconomic forecasts.

Status and Results

A public scoping session was held on October 20, 1992 to solicit input and comments from the public on the forecast update process.

Three expert panel sessions were also held: one on alternative methodologies, and two on assumptions. Alternative forecast methodologies were covered during the October 29th session. The meeting covered each component of aviation demand included in the forecast, and options for dealing with each component in the revised forecast.

On November 18th, 1992, aviation assumptions for the forecasts were discussed with aviation industry professionals. On November 19, 1992, general socioeconomic assumptions were discussed in detail with a panel made up of professionals with expertise in this area.

The issues discussed at the three panel sessions included both general matters such as local and national economic conditions, and competing technologies, and detailed assumptions, including air carrier yields, trends in aircraft size, the changing role of regional (commuter) airlines, and activity associated with the "no-build" alternative. Input from these panels is being included in the forecast update.

Purpose and Objectives

The Long-Term Comprehensive Plan (LTCP) for Minneapolis-Saint Paul International Airport was developed to provide a blueprint for airport development through the year 2020, should the Legislature decide to retain MSP as the region's air carrier airport. It includes a 2010 development plan and a 2020 conceptual plan. The completed Plan will also provide a benchmark of development costs, environmental consequences, and other considerations for MSP to compare with the Comprehensive Plan to be developed for a new airport.

Status and Results

Volumes 1 through 4 of the LTCP for MSP were published in 1990, Volume 5 was published in 1991. Volume 5 presents the recommended Airport Development Concept to be used as the basis for the 2020 plan. Two plans were prepared to describe the concept: a 2010 Comprehensive Plan, reflecting the required facilities for the traditional 20 year planning horizon, and a 2020 Conceptual Plan, showing future facilities needed to meet 2020 requirements (the planning horizon established by the 1989 Metropolitan Airport Planning Act).

During 1992, technical work on components of the LTCP continued, including separate analysis of potential aircraft maintenance hangar siting; alternative control tower locations; detailing of the Taxiway C/D complex; and investigation of phasing options for the recommended plan.

Purpose and Objective

The purpose of the FAA's Capacity Task Force for MSP is to identify potential projects to increase the airport's runway and taxiway capacity, and to quantify the potential benefits of these projects. The FAA has conducted or is in the process of conducting capacity design studies for all major airports in the country. The Design Team includes FAA representatives from air traffic control, flight standards, and the Airport Capacity Office, airport tenants, and representatives from local and State agencies. The study will draw on information from the airport's Long-Term Comprehensive Plan. Data from the capacity study will help to quantify the benefits of capacity enhancement projects and will be used in the update of the MSP Long-Term Comprehensive Plan.

Status and Results

During 1992, the Task Force met in July, August, September, October, and December to discuss potential capacity enhancement alternatives and assumptions for analysis. Technical analysis began in July. The study is scheduled for completion by the end of 1993.

Development of Alternative Environmental Process and
First Phase Scoping

Purpose and Objective

As required by legislation, the environmental, economic, and community consequences of the Dual Track alternatives (i.e. expand MSP, build a new airport and close MSP, and the "no-build") must be assessed and documented. A process involving a phased approach to allow incremental decisions has been developed. As such, an alternative environmental process was developed with the Minnesota Environmental Quality Board (EQB) and the Federal Aviation Administration to provide input at the key decision points in the Dual Track Process consistent with Federal and State environmental documentation requirements.

The process involves the preparation of a series of Alternative Environmental Documents (AED's) to meet State requirements for the incremental decisions to be made (best new site, best new airport comprehensive plan, etc.), and State and Federal EIS's on the final alternatives.

The analysis in the AED's and EIS's will assess the social and economic impacts to the region and affected governmental units and the impacts to the natural environment. The AED's will focus on each option separately (MSP, New Airport). The results of the individual AED's will be combined in the State and Federal EIS. The EIS will focus on three major options--the best MSP option, the best new airport option, and the "No-build" option. Other feasible options will be addressed in the AED's and EIS's, where appropriate.

Status and Results

The EQB approved an alternative environmental review process for the Dual Track Airport Planning Process in the spring of 1992. The process will include EIS-level analysis in the AED for each element (site selection, new airport comprehensive plan, MSP LTCP, etc.) with public and agency review and comment before decisions are made and the next step is initiated. MAC will determine the adequacy of the AED's after EQB review and comment, with the EQB determining the adequacy of the State EIS and the FAA determining the adequacy of the Federal EIS.

A First Phase Scoping Report on the Alternative Environmental Review Process and on the Dual Track Airport Planning Process was published in April 1992. Three scoping meetings were conducted on April 21 and 22 to solicit agency and public input. Responses to public and agency comments were begun.

Purpose and Objective

After the Metropolitan Council selected the Dakota Search Area in December 1991, the MAC began the site selection process for the new airport. The MAC developed a three-tiered methodology for site selection, including:

1. Site Identification, to identify all possible locations for the new airport based on a limited number of general criteria;

2. Site Screening, to reduce the number of potential sites to the three or four best candidate sites. A set of detailed criteria are being used to assess physical characteristics, operational efficiency, community/social impacts, environmental impacts, and development costs.

3. Site Selection, to analyze the final candidate sites and recommend a "preferred" site. Analysis during this final phase will include the factors addressed during site screening, but at a more comprehensive level, and any additional factors that may be required to distinguish among the sites and to meet AED requirements.

Status and Results

The first phase, site identification, began in the winter of 1992. Although it was desirable to identify as many sites as possible within the Search Area, certain constraints were identified. These factors represented significant impediments to siting a new airport in the Search Area, and were developed into six site identification criteria:

1. Airport runways, taxiways and other facilities must be contained within the Search Area. It was also assumed that FAA Runway Protection Zones and land within the FAA Building Restriction Lines should also be contained within the Search Area because the FAA requires these areas to be airport property.

2. State Safety Zones A and B and the Ldn 65 noise contour may not impact urbanized areas or population centers outside the Search Area.

3. Runway layout must maintain the full operational capability of the Conceptual Layout Design.

4. No site would be considered which places airport facilities in areas of extensive wetlands.

5. No site may be considered which would result in major ground facilities located in floodways.

6. Physical features not compatible with low altitude aircraft overflight (specifically avoid overflights of the Pine Bend Refinery) must be avoided.

At its June 9, 1992 meeting, the Site Selection Technical Committee (see Community/Agency Coordination section) identified a number of potential sites for an airport in the Search Area. After eliminating duplicate and/or overlapping sites, a total of seven potential sites were identified. Three sites are east of the Vermillion River, southwest of Hastings. Four sites are west of the Vermillion River, near the center of the Search Area.

During the fall of 1992, the site screening process was begun. Each of the seven potential sites is being examined using 56 criteria within the following broad categories:

- Airport characteristics (including operational efficiency, airport expandability, and ground access times);

- Community/social impacts (including displaced communities and people, effects on local land use plans, community infrastructure, noise impacts, State safety zones, historic/archaeological resources, farms, business, and public parks/recreation land);

- Other environmental impacts (including wetlands, waste disposal sites, water quality, bird strike issues, biotic communities, and floodplains); and

- Differential site preparation costs.

By the end of the year, most of the screening analysis had been performed. The balance of the analysis and process of screening the seven sites down to three or four should be completed by the end of February 1993.

Purpose and Objective

Throughout the 1992 - 1996 work on the Dual Track Process, a high level of public and agency coordination is being maintained. MAC staff and consultants are working on a continuing basis with several committees and review groups in each of the elements. There is coordination with governmental agencies above and beyond that required to complete the technical studies.

The following specific actions are included in the current phase of the program:

- Briefings of the State Advisory Committee at the call of the Co-Chairs.
- Establishment of a Site Selection Task Force to provide a policy oversight role for the continuing work on all study elements. The Task Force has met monthly since October 1992 to review site selection related activities.
- Establishment of a Site Selection Technical Advisory Committee to review and provide input at key points during the process. The Committee has met monthly since April 1992 to review technical analysis on the site selection study.
- Presentations to MAC at major decision points.
- Public meetings were held on April 21 and 22 on the site selection study scoping documents; September 1 on site identification criteria; September 22 and 23 on the outline for the Decision Document; October 20 on forecast methodologies; and December 15 on site screening criteria.
- Bi-monthly newsletters throughout the process.

Status and Results

The community and agency coordination element of the New Airport/Dual Track Planning Process is an ongoing effort.

Purpose and Objective

The Minnesota Department of Natural Resources, under an agreement with the Metropolitan Airports Commission, conducted a Biological Survey in the Dakota Search Area. The survey, which began in the spring of 1992, focused on rare, threatened, or endangered species of plants and animals and natural vegetation communities.

The multi-level survey technique consisted of three steps: interpretation of aerial photography is used to identify all potential natural habitat in the area, low altitude aircraft evaluation to determine which sites have escaped significant human alteration, and intensive ground surveys of selected high-quality natural area sites. On these natural sites, field biologists and ecologists documented the occurrence and condition of rare plants, animals and natural communities.

Status and Results

Final products of the 1992 field survey of the Search Area consisted 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.

A report by DNR summarizing the survey was provided to the MAC in October 1992, and was used in the site screening process.

Work to be Conducted in 1993

Purpose and Objective

The screening of the seven potential sites should be completed by the end of February 1993. The remaining task of the site selection study will be to choose the "best" site from the remaining candidate sites. An extensive list of factors will be examined, including (but not limited to):

- Physical environment (including topography, soils, geology, meteorological conditions, and floodplains);
- Airfield and airspace (including operational efficiency, and airspace interaction);
- Ground access/utilities (including travel times, effect on existing roadway system, availability of rail access, and availability of utilities);
- Regional/community, and socioeconomic factors (including socioeconomic, metropolitan area growth impacts, displaced commercial/industrial employment, land ownership,community/social impacts, displaced residential population, public services, institutional factors, and state safety zones);
- Environmental impacts (including noise impacts, public parks and recreation land, historic/archaeological/cultural impacts, biotic communities, wetlands, wild and scenic rivers, prime farmland, waste disposal sites, water quality, air quality, solid waste, bird strike issues, light emissions, energy supply/natural resources, construction impacts, cumulative environmental impacts); and
- Costs (including costs associated with land acquisition, site preparation, airport facility construction, utility construction, relocation, and access).

Some of the analysis needed for the site selection phase was accomplished during site identification and site screening. However, the level of analysis required to select the final site will in many cases be more comprehensive.

Status and Results

Site selection should be initiated following completion of the screening process during the winter of 1993.

Purpose and Objective

After the final site has been chosen, work will commence on a detailed comprehensive plan for the new airport. However, in detailing out the airport layouts for the final "candidate" sites, work on some of the elements of the new airport comprehensive plan will be initiated. There will, therefore, be some overlap between the site selection study and the new airport comprehensive plan. For that reason, the new airport comprehensive plan is discussed as 1993 work. The plan will consist of the following tasks:

- Prepare comprehensive plan inventory--Data files from the site selection element of the Dual Track Process will be reviewed for adequacy. Additional data will be collected as required.

- Identify alternative airport layouts--Several alternative layouts will be developed to optimize operational efficiency, taking into account existing physical and community factors.

- Evaluate alternative layouts--The most feasible combinations of airfield, terminal, and ground access layouts will be identified and evaluated based on effectiveness criteria.

- Select preferred layout--The preferred layout will be selected.

- Prepare transfer analysis--Assuming that MSP is closed and all aviation activity is transferred to the new airport, a transfer schedule will need to be developed. The schedule will address necessary interim improvements at MSP while new airport construction is occurring, and calculate aircraft delays, and user costs.

- Prepare airport plans--Detailed plans will be developed, including airport layout plans, land use plans, airport property map, airport access plans, and utility plans. A 2010 Comprehensive Plan and a 2020 Conceptual Plan will be prepared.

- Prepare financial plan--Development schedules will be prepared addressing the initial construction period, short-range development, intermediate development, and long-range development. From these schedules, costs can be estimated. Operational and maintenance costs will be identified as well as revenue sources. A 20-year financial plan will be prepared based on the above information.

- Prepare implementation plan--An implementation plan will be necessary to identify administrative and institutional procedures, permits and legal and regulatory actions required for construction and operation of the new airport. The information will be used to create a schedule of required implementation actions.

- Prepare comprehensive plan report--A report will be prepared to document each major element of the comprehensive planning study.

Status and Results

Some work on the comprehensive plan for the new airport will be conducted during the latter stages of the site selection study, to provide a better assessment of the best runway configuration and arrangement of facilities for each of the candidate sites. The remainder of the work will be initiated in early 1994.

Continue Environmental Documentation Associated with Site Selection Study

Purpose and Objective

The environmental documentation associated with the Site Selection Study provides a record of analysis and of community and agency participation in the process. Following is a summary of the environmental documentation to be developed in 1993:

- Responses to comments on the First Phase Scoping Report will be completed and distributed.

- A Draft Scoping Document (SD) and Draft Scoping Decision Document (SDD) on Site Selection will be prepared by the MAC that describes the site identification and site screening processes, and the issues and impacts proposed for evaluation in the alternative environmental document (AED). The Draft SD/Draft SDD will be presented at public meetings and will be made available for public and agency review and comment.

- Based on comments received, the MAC will prepare a Scoping Decision Document (SDD) which will specify the alternatives, issues and impact areas to be addressed in the AED. The SDD will also include responses to all substantive comments on the scoping report.

- The MAC will prepare a Draft Alternative Environmental Document (AED) for the new airport site selection study. The Draft AED will be distributed to interested parties and will be made available to the public. A public hearing(s) will be held. Following the hearing and comment period, the Final AED will be prepared, incorporating all timely and substantive comments, and reviewed by the EQB. The MAC will then determine the adequacy of the AED, and select the new airport site for further study and analysis.

Status and Results

Work on the Scoping Document and Draft Scoping Decision Document for the site selection process was initiated in December 1992. Responses to comments for the First Phase Scoping Report should be completed and distributed in February 1993. The SD/Draft SDD should be available by March 1993. A final Document will be published in the Summer. The Draft AED should be available for review by August 1993. The Final AED on site selection should be published by January 1994.

Purpose and Objectives

In 1992 the process to update the airport activity forecasts originally prepared in 1989 for use on both tracks of the Dual Track Airport Planning Process was initiated. The update will use the latest historical information, current airline growth plans, and updated regional socioeconomic forecasts.

The updated forecast will consider a series of scenarios and sensitivity analyses to identify the impact of various airline industry trends and regional demographics on future passenger and aircraft activity levels. The forecast will differentiate between activity anticipated at MSP and that expected at a replacement facility in the Dakota Search Area.

Status and Results

See "Initiation of Dual Track Forecast Update" on page 5.

Purpose and Objective

The Long-Term Comprehensive Plan for MSP will be updated using the revised forecasts developed under the Dual Track Airport Planning Process. The primary goals of the LTCP Update are to determine the projected aviation activity and passenger levels for MSP in the year 2010 and 2020, assess the changes in facilities required to meet these levels from the current LTCP, and to update the alternatives previously considered and the recommended Conceptual Plan to determine adjustments that need to be made. The key components of the LTCP Update include:

- Review Goals and Objectives
- Update Existing Conditions at MSP
- Update Forecasts of Aviation Demand
- Revise Airport Facility Requirements
- Revalidate Airfield and Terminal Alternatives
- Update 2010 Development and 2020 Conceptual Plan.

Status and Results

The update of the LTCP is expected to begin in the summer of 1993, following completion of the revised forecasts.

Purpose and Objective

As described in the discussion of 1992 activities in this report, the purpose of the Capacity Task Force for MSP is to identify potential projects to increase the airport's runway and taxiway capacity, and to quantify the potential benefits of these projects. The study is drawing on information from the airport's Long-Term Comprehensive Plan. Data from the capacity study will be incorporated in the LTCP Update.

Status and Results

Technical analysis began in July 1992. The study should be completed by the end of 1993, and results will be utilized, where appropriate, in the LTCP Update.

Purpose and Objective

Each step of the Dual Track Airport Planning Process requires a high level of public and agency coordination. MAC staff and consultants will continue to work on a continuing basis with several committees and review groups during the process, and coordinate with governmental agencies where appropriate.

The following specific approaches will be continued in 1993:

- Briefings of the State Advisory Committee at the call of the Co-Chairs.
- Regular meetings of the Site Selection Task Force will provide a policy oversight role for the continuing work on all study elements and in key decisions. The MSP Task Force will also be reconvened during 1993.
- Regular meetings of the Site Selection Technical Advisory Committee to review technical analyses and provide input at key points during the process. The make-up of the Committee will be modified at the initiation of the New Airport Comprehensive Plan to best match the technical requirements for each specific element. A similar group will be convened to participate in the MSP Comprehensive Plan Update.
- Presentations to MAC at major decision points.
- Public meetings/workshops at major decision points.
- Bi-monthly newsletters throughout the entire program.
- Public information brochures at appropriate points.

Status and Results

The community and agency coordination element of the Dual Track Planning Process is an ongoing effort.

MAC COSTS - 1992

Consultants	Met Council	DNR	Dakota County
$1,116,000	$268,120	$50,000	$50,000

MAC COSTS - 1993

Consultants	Met Council	EQB
$1,200,000	$107,590	$75,000