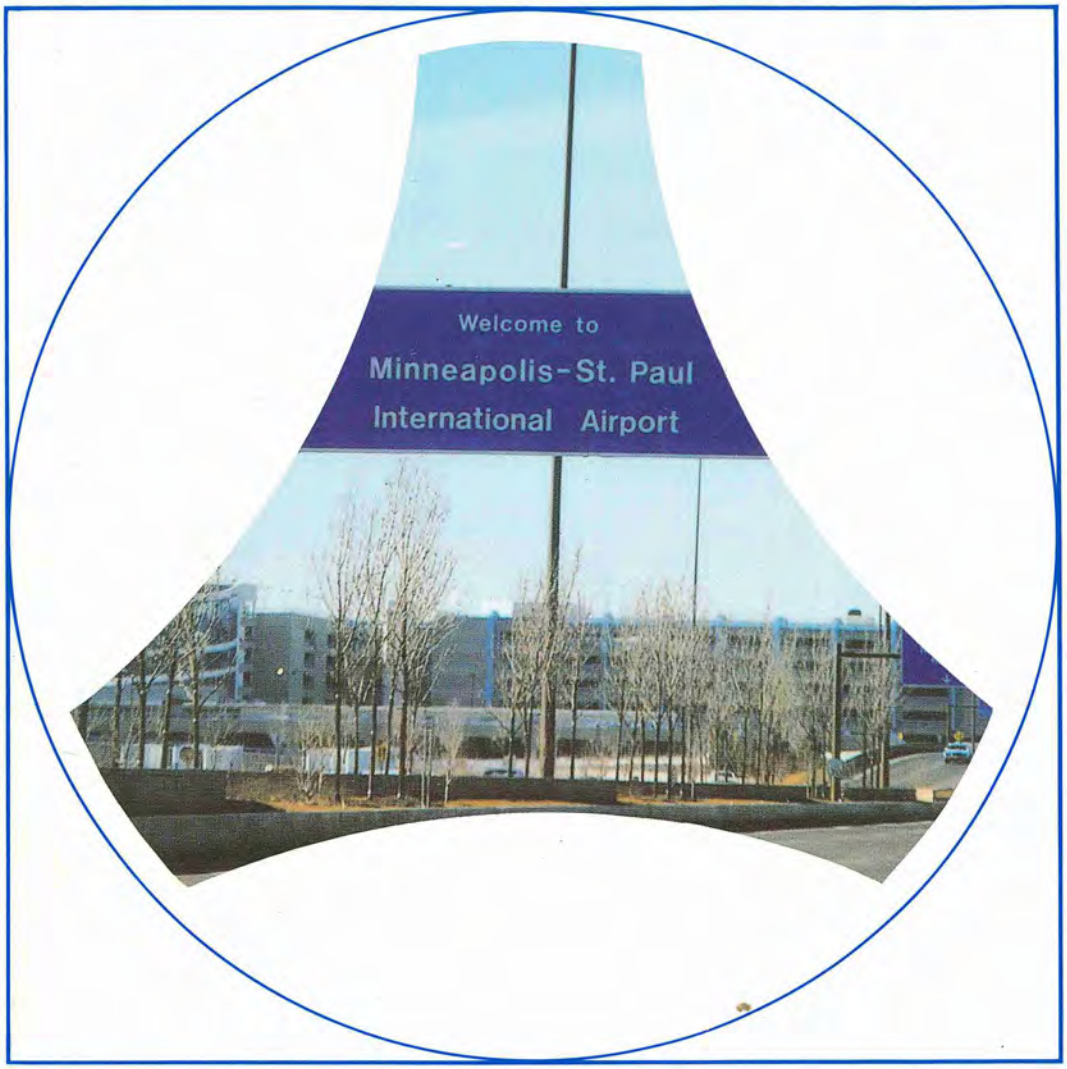
Minneapolis-Saint Paul International Airport



Long-Term Comprehensive Plan

Scoping Decision Document

Metropolitan Airports Commission

Dual Track Airport Planning Process

Minneapolis-Saint Paul International Airport Long-Term Comprehensive Plan

Scoping Decision Document

March 1994

Prepared for:

Metropolitan Airports Commission

Prepared by:

HOWARD NEEDLES TAMMEN & BERGENDOFF
ARCHITECTS ENGINEERS PLANNERS

and associated firms

SCOPING DECISION DOCUMENT

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I. INTRODUCTION

PURPOSE OF DOCUMENT

The purpose of the Draft Scoping Decision Document (SDD) is to present the alternatives, issues and impacts that the Metropolitan Airports Commission (MAC) proposes to study, analyze and discuss in the Alternative Environmental Document (AED) for the selection of the Long-Term Comprehensive Plan (LTCP) to accommodate the air transportation needs of the Metropolitan Area and state at the Minneapolis-St. Paul International Airport (MSP) for the year 2020 and beyond.

The MSP LTCP project is being conducted in accordance with the Alternative Environmental Review Process proposed by MAC and approved by the Minnesota Environmental Quality Board (EQB) on March 19, 1992, and in accordance, where appropriate, with Federal Aviation Administration Order 5050.4A issued October 8, 1985 by the Federal Aviation Administration (FAA) of the U.S. Department of Transportation. Compliance with FAA Order 5050.4A ensures that the project will meet the procedural and substantive environmental requirements set forth by the Council on Environmental Quality in its regulations implementing the National Environmental Policy Act.

MAC is the designated Responsible Governmental Unit (RGU) for the scoping documents and the AED.

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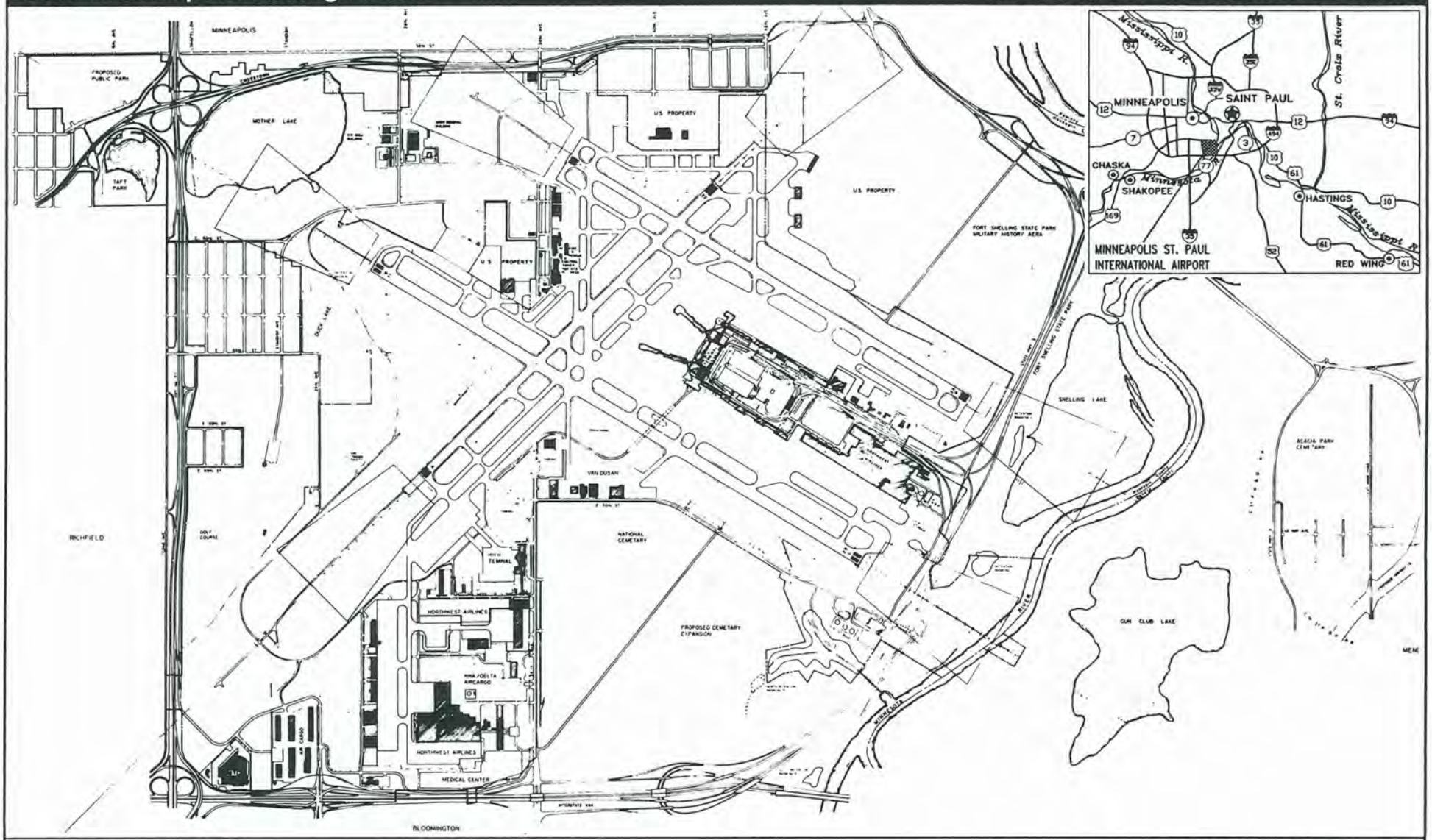
PROPOSED PROJECT

The proposed project is the development of the Long-Term Comprehensive Plan (LTCP) to provide the capacity and facilities at MSP to meet the future air transportation demands -- and the local/regional facilities needed to accommodate the plan. Figure 1 shows the general location of MSP and the existing airport layout and facilities.

Dual Track Airport Planning Process | **MSP Long-Term Comprehensive Plan**



0 1,000 2,000

Scale in Feet

N

HNTB

MAC Minneapolis Saint Paul Metropolitan Airports Commission

Figure 1

MSP Location Map and Existing Airport Layout

SCHEDULE FOR MSP LTCP

The tentative schedule of activities for the MSP LTCP is:

Scoping EAW/Draft SDD (Scoping Decision Document) and Beginning of Comment Period	January 31, 1994
Public Scoping Meeting	February 15, 1994
End of Comment Period	March 2, 1994
EQB Review/Comment on SDD	March 17, 1994
MAC Adoption of SDD	March 21, 1994
Draft AED (Alternative Environmental Document) and Beginning of Comment Period	August 1, 1994
Public Hearing(s)	September, 1994
End of Comment Period	September 30, 1994
EQB Review/Comment on Final AED	November 17, 1994
MAC Adoption of Final AED, Determination of Adequacy, and Selection of MSP LTCP	November 21, 1994

II. EVALUATION OF ALTERNATIVES

ALTERNATIVES CONSIDERED

The alternatives under consideration were presented in the Scoping EAW and are shown in Figures 2, 3, 4, 5, 6 and 7, which follow page 4.

ALTERNATIVES ELIMINATED

LTCP Alternatives 3 and 4 (Figure 4 and 5) are eliminated from further consideration because of significant operational and noise concerns brought to light during the preparation of the Long-Term Comprehensive Plan (LTCP) for MSP. These concerns result from the westward stagger of the new runway by approximately 5,000 feet from the landing threshold for the existing Runway 29L and the assumption that the airport would operate with departures using the existing parallel runway (closest to the terminal area) and arrivals using the new parallel runway. The reason for the stagger of the runway is to accommodate the approach surface clearance of the elevated terrain in the Fort Snelling National Cemetery. The cemetery has been declared eligible for listing on the National Register of Historic Places and is the third most active cemetery in the National Cemetery System. The cemetery's 436.3 acres hold over 96,000 graves.

The use of the new runway for landings when the airport is operating to the northwest places landing aircraft close to the area of greatest wake turbulence from departures on Runway 29L. In addition, wake turbulence produced by landing aircraft could drift to the takeoff runway (29L), where aircraft would be breaking ground on departure. Interaction with wake turbulence by aircraft in close proximity to the ground is a significant safety issue. These situations would result in an additional dependency between the runways, which would reduce the capacity. Also, the airlines expressed concern during the preparation of the LTCP for the safety of aircraft as they pass over the higher ground of the national cemetery when landing on the new runway to the northwest or when departing over it to the southeast.

Another operational concern involves the penetration of the Terminal Instrument Procedures (TERPS) approach surface to the south parallel runway from aircraft on the taxiway between the existing Runway 11R-29L and the new runway. This would mean that while aircraft are landing on the south parallel runway, Taxiway B (planned as a full length parallel taxiway to Runway 11R-29L on the south side of the runway) would not be usable in the area of the stagger between the south parallel runway and Runway 11R-29L. This would be a significant operational problem.

A south parallel runway would also generate significant additional noise impacts for south Minneapolis and Richfield. The population within the Year 2000 DNL 60 noise contour for Alternatives 3 and 4, generated during the preparation of the LTCP, would be 49,250 persons. This would be over 10,000 more persons than the preferred alternative Concept 6. Noise impacts would be even greater, if use of the new south runway was changed during northwest-flow conditions to accommodate most of the take-offs (in order to alleviate some operational and

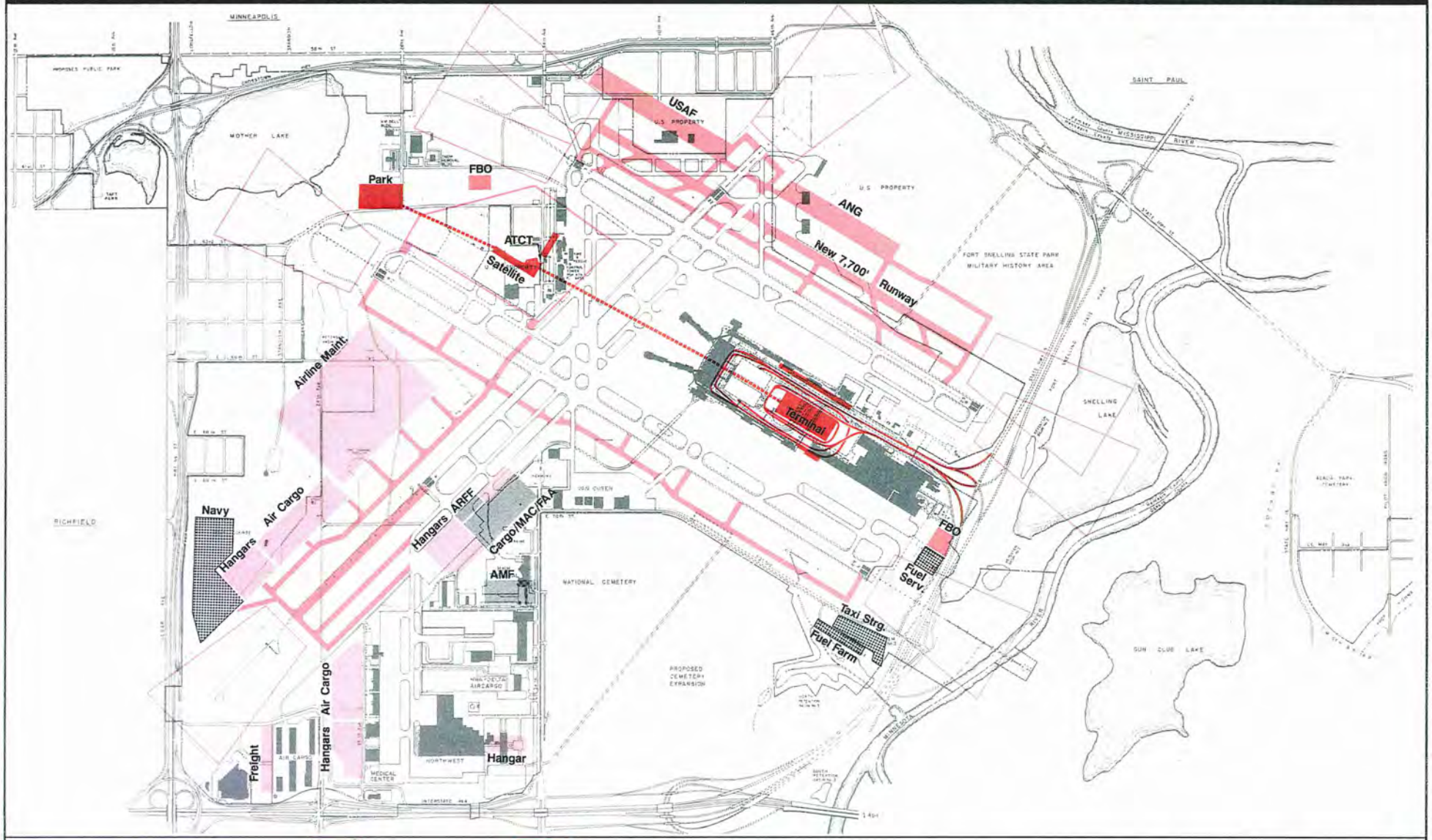
capacity concerns). This change would move aircraft departing to the northwest approximately 5,000 feet closer to Minneapolis and Richfield when they begin their "take-off roll".

This staggered runway layout would also require that the FAA runway safety area and object-free area be designed to cross Trunk Highway 77 (TH 77), also known as Cedar Avenue. The design would require a "tunneling" of TH 77 beneath a bridge-like structure that would support the required safety areas. This would bring airport facilities across Cedar Avenue into Richfield and would significantly complicate access to the new west terminal area.

ALTERNATIVES TO BE STUDIED IN AED

MSP LTCP Alternatives 1, 2, 5 and 6 will be studied in the AED.

Dual Track Airport Planning Process | **MSP Long-Term Comprehensive Plan**



Airfield
Airline/Cargo
Gen. Aviation
Terminal Area
Administration
Other

0 1,200 2,400
Scale in Feet

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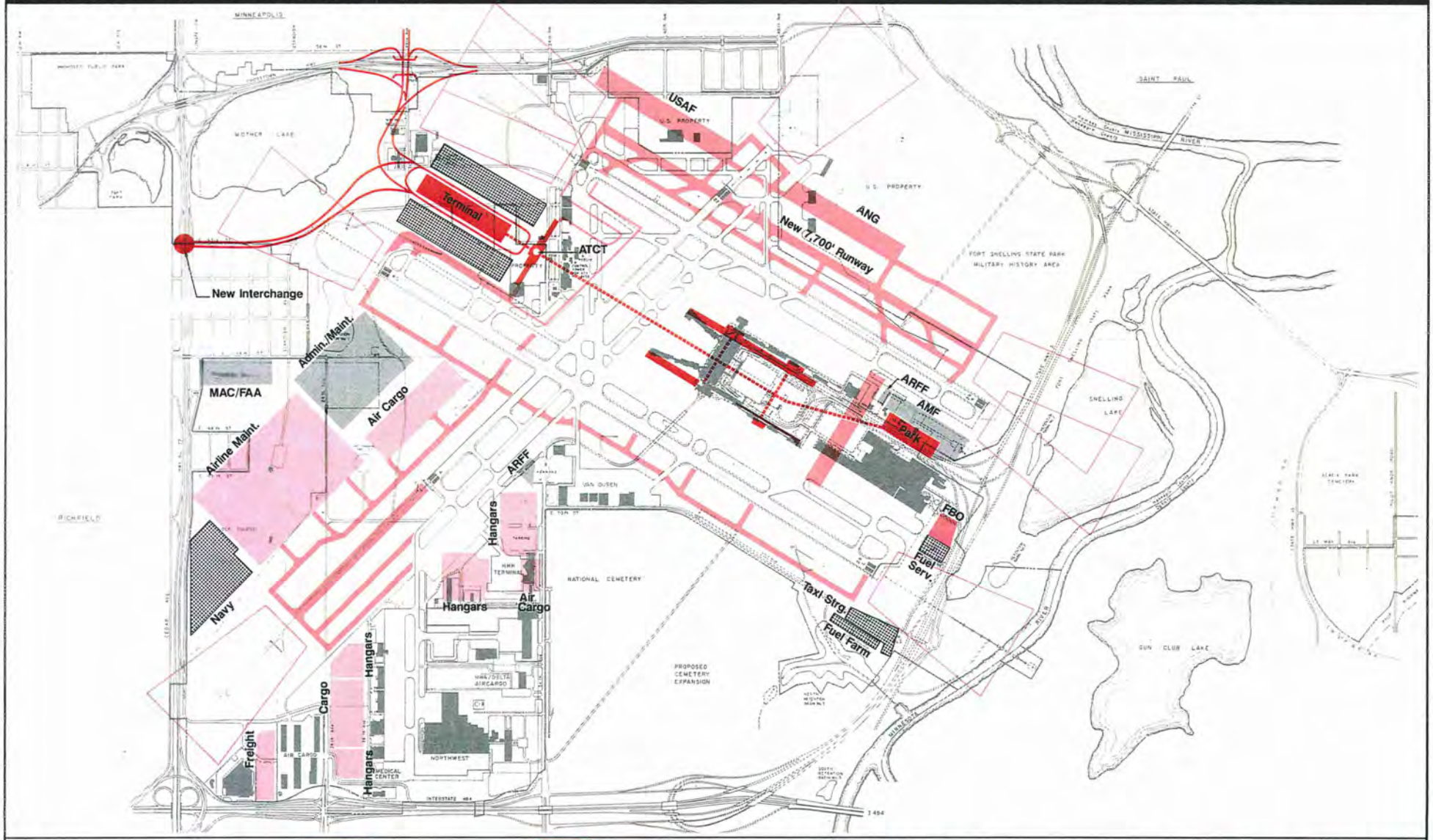
HNTB

MAC Minneapolis Saint Paul Metropolitan Airports Commission

Figure 2

LTCP Alternative 1

Dual Track Airport Planning Process | **MSP Long-Term Comprehensive Plan**



Airfield
Airline/Cargo
Gen. Aviation
Terminal Area
Administration
Other

0 1,200 2,400
Scale in Feet

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MINNEAPOLIS SAINT PAUL METROPOLITAN AIRPORTS COMMISSION MAC

Figure 3

LTCP Alternative 2

Dual Track Airport Planning Process | **MSP Long-Term Comprehensive Plan**

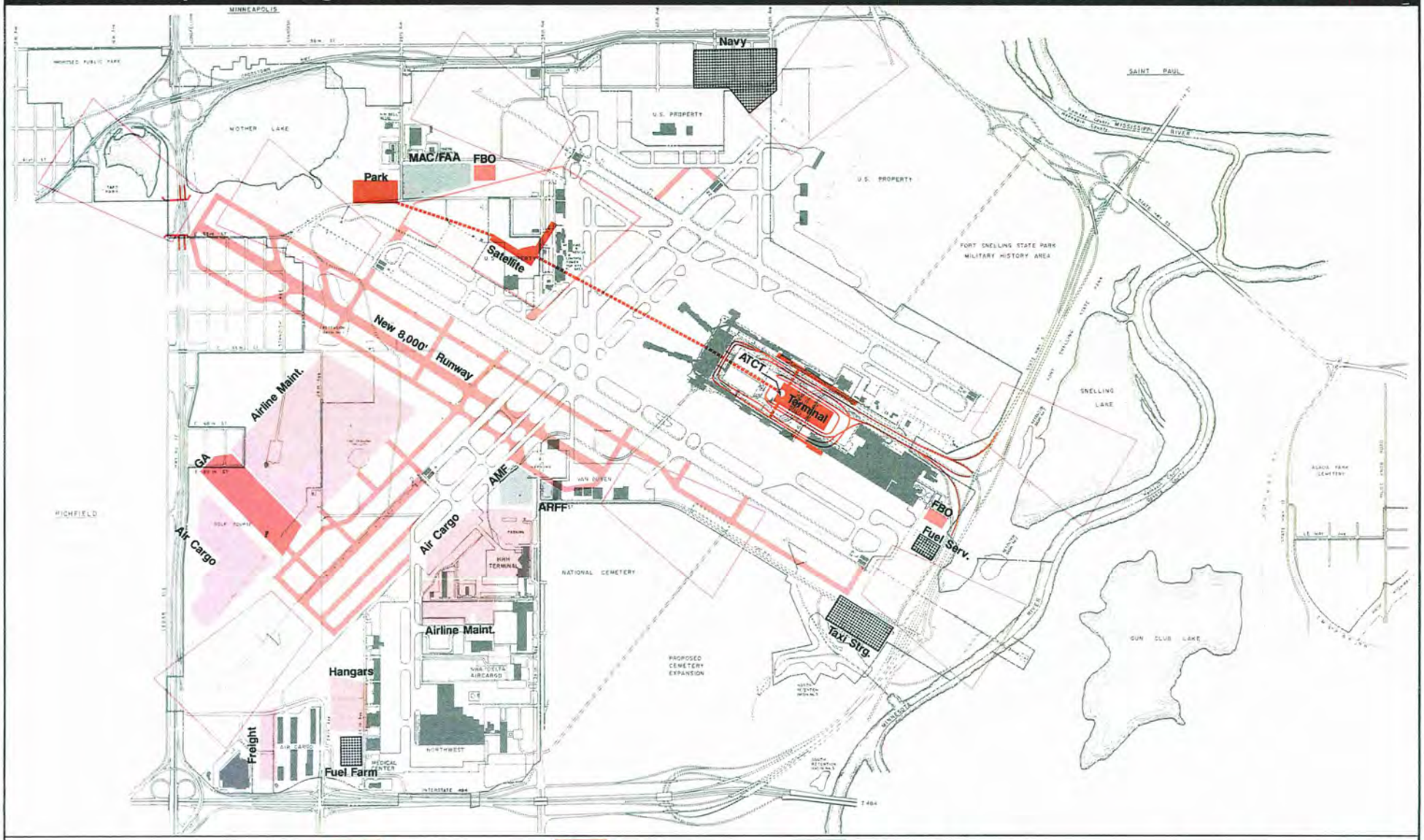

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Figure 4

LTCP Alternative 3

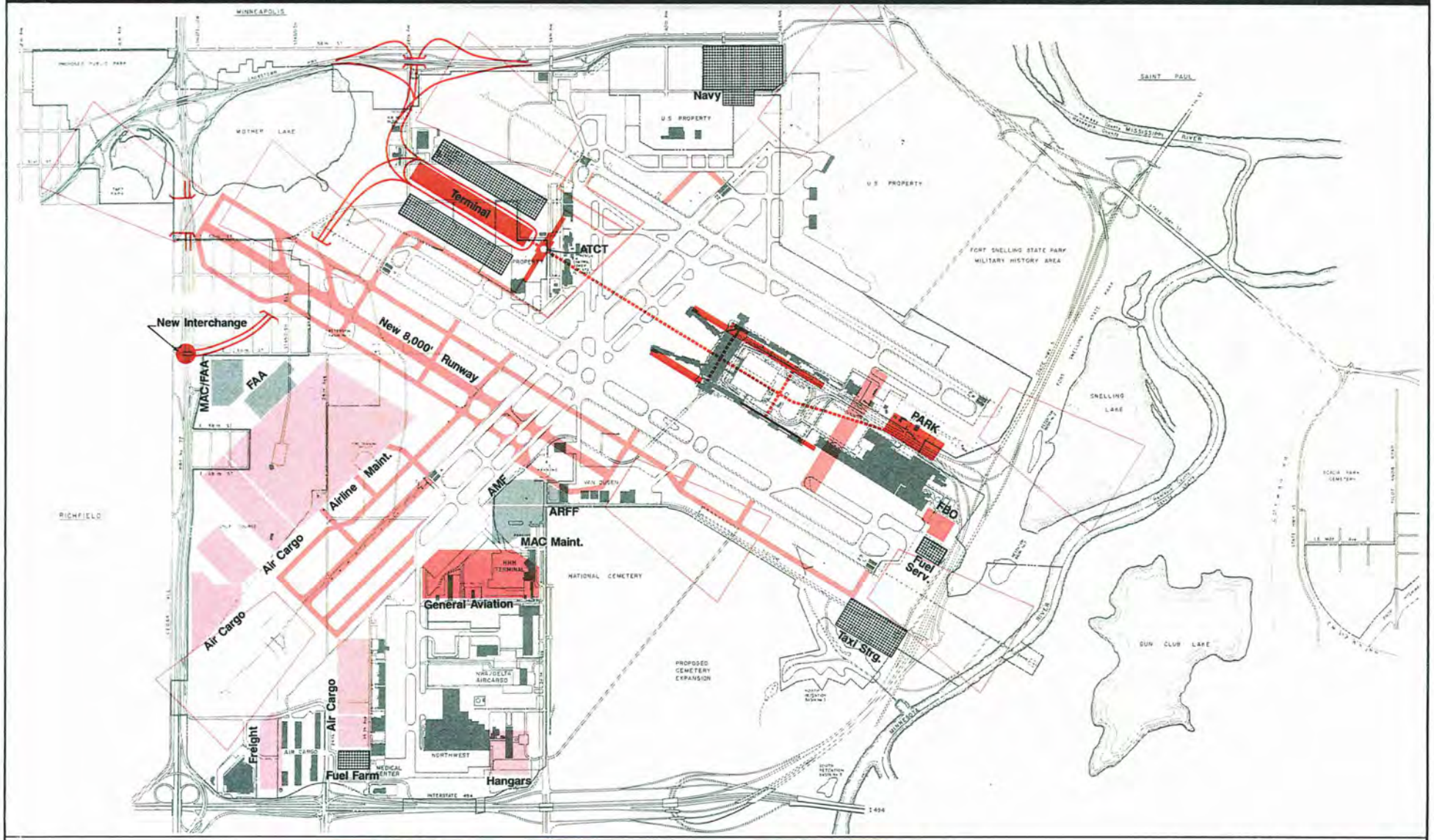

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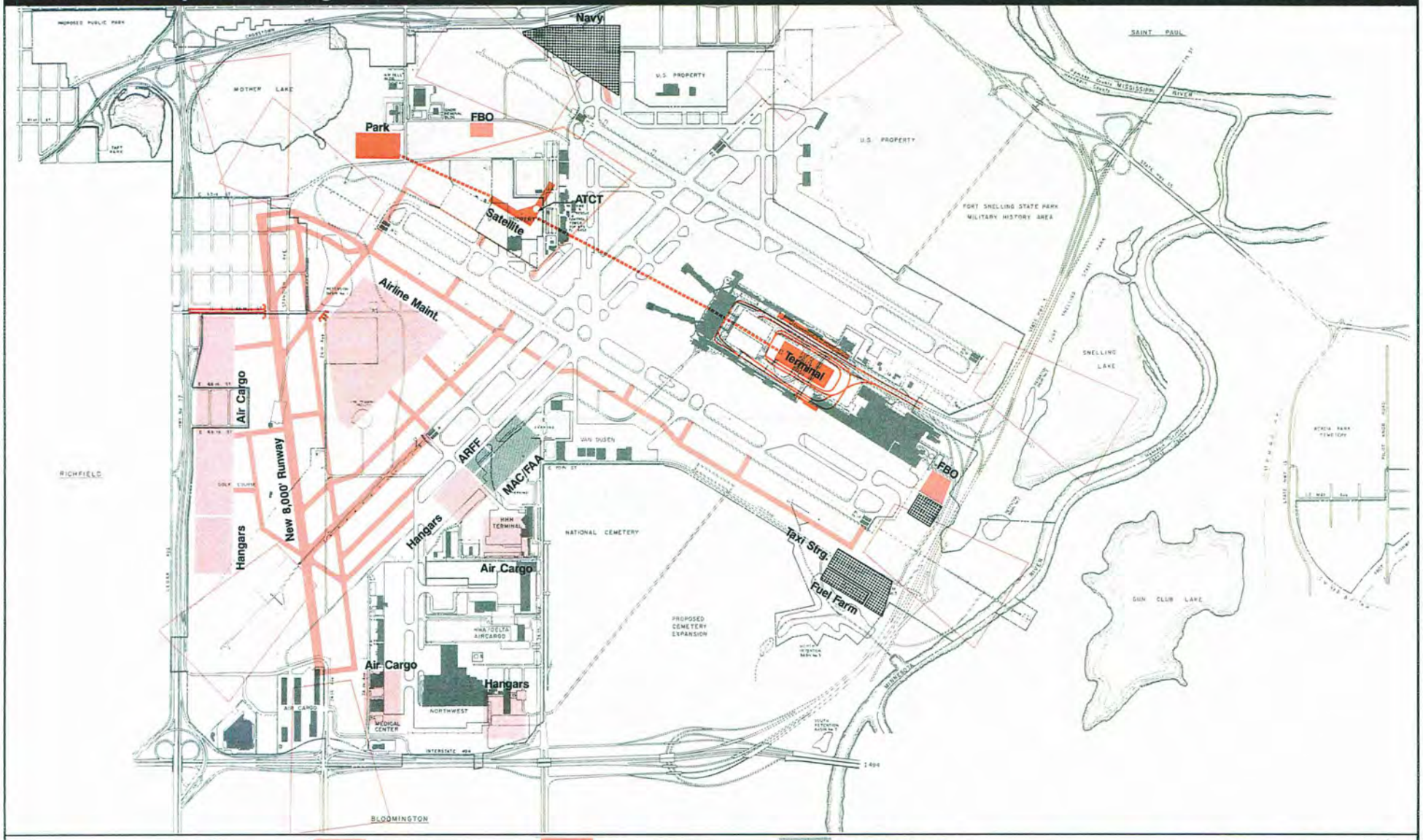
Figure 5

LTCP Alternative 4

Dual Track Airport Planning Process | **MSP Long-Term Comprehensive Plan**



Airfield
Airline/Cargo
Gen. Aviation
Terminal Area
Administration
Other

0 1,200 2,400
Scale in Feet

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Figure 6

LTCP Alternative 5

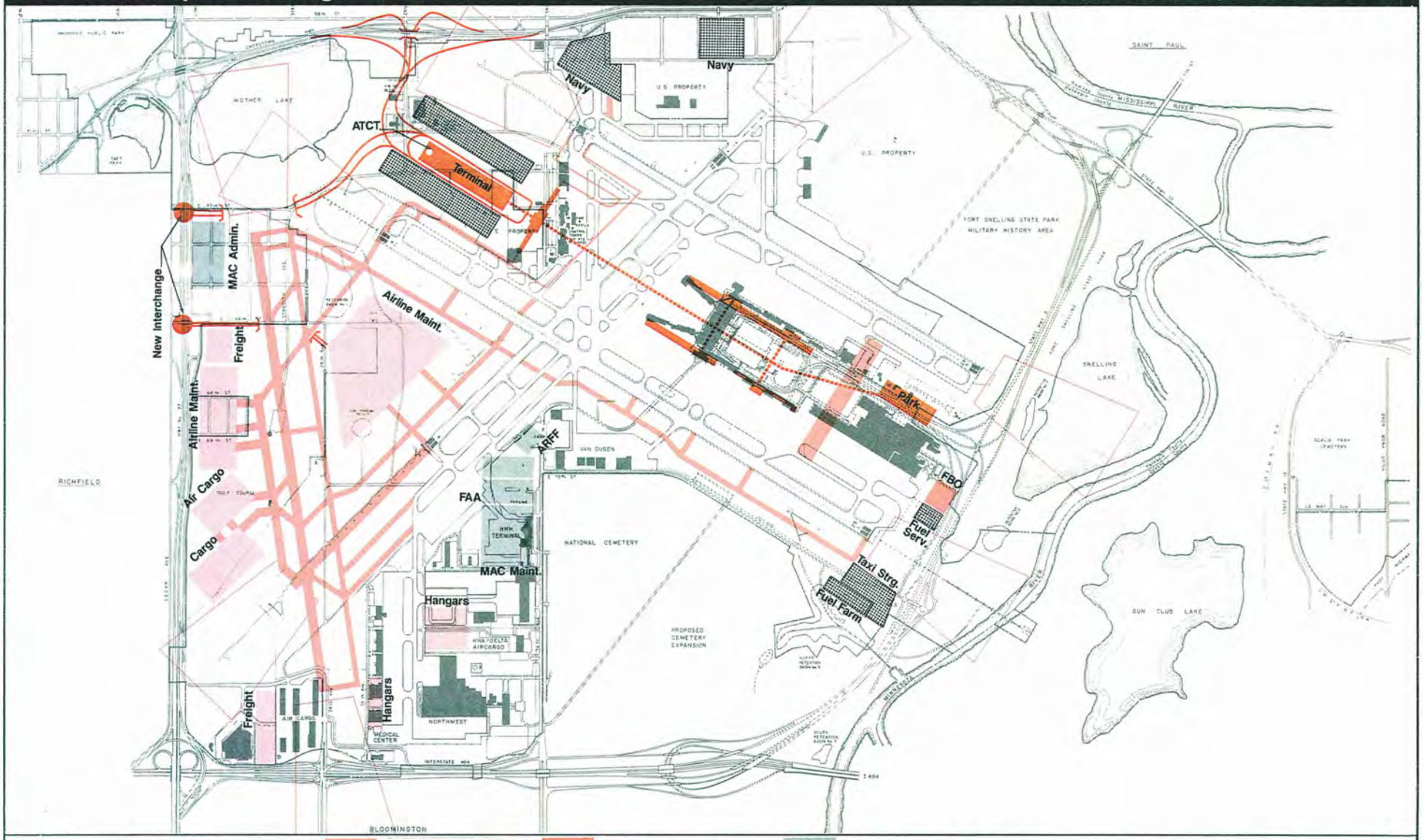

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Figure 7

LTCP Alternative 6

III. SUMMARY OF ISSUES AND CONCERNS

The following issues and concerns are related to the selection of the most appropriate expansion plan for MSP. The list is a summary of comments received on the First Phase Scoping Report and input during the MSP LTCP scoping process. Additional issues may arise during the preparation of the AED and will be included.

1. The major assumptions and forecasts that determine airport facility requirements.

2. Potential aircraft overflight noise impacts, including stress-related health disorders.

3. Potential aircraft ground noise impacts and mitigation measures (including the replacement of berms on the Rich Acres Golf Course removed by Alternatives 5 and 6).

4. Potential noise impacts of highway traffic.

5. Impact on energy supply and natural resources.

6. Land use compatibility, and the support and enhancement of land uses in adjacent communities.

7. Social and economic community impacts.

8. Relocation of people and businesses.

9. Impact on local comprehensive plans.

10. Visual impacts (including light emissions).

11. Impact on public park and recreation land.

12. Impact on historic, architectural and archaeological resources.

13. Impact on wetlands, floodways and floodplains.

14. Impact on rare, threatened, endangered and special-concern species.

15. Impact on Minnesota Valley National Wildlife Refuge and Fort Snelling State Park.

16. Impact on natural habitat and wildlife (including bird strikes).

17. Impact on regional transportation system (highways and transit).

18. Air quality impacts.

19. Impact of stormwater on surface water bodies, groundwater (aquifers) and water supply.

20. Impact of wastewater (sanitary, industrial, glycol) on surface water bodies, groundwater (aquifers), water supply and treatment systems.

21. Impacts of spent glycol deicing fluid.

22. Impact of solid and hazardous waste disposal.

23. Cost of construction, land acquisition, replacement of displaced military facilities, and needed improvements to the local and regional transportation systems.

24. Environmental impacts due to ground access improvements.

25. Public safety.

26. Impact on Minneapolis water system.

IV. ANALYSIS OF ISSUES AND IMPACTS

INTRODUCTION

The issues and impacts to be addressed in the AED will focus on development alternatives for MSP only, with the primary purpose to document differences in environmental effects between the alternatives. The environmental effects of new airport development options are being addressed separately in the New Airport Comprehensive Plan AED. The detailed analyses comparing the environmental, community, social and economic effects of expanding the existing airport with the construction of a new airport in Dakota County (and with other reasonable alternatives including "no action") will be undertaken in the Environmental Impact Statement (EIS) following completion of the MSP and New Airport AED's.

ISSUES AND IMPACTS REQUIRING DETAILED ANALYSIS

The following issues and impact areas were determined in the MSP LTCP scoping process to be potentially significant and to require detailed analysis in the AED. Measures to mitigate the impacts will be discussed, where appropriate.

Forecasts

The airport activity forecasts developed in 1989 for use in the Long-Term Comprehensive Plan (LTCP) for MSP and for the New Airport Site Selection Study were updated in the Spring of 1993. The updated forecasts will be used in the MSP Long-Term Comprehensive Plan update, the New Airport Comprehensive Plan, and for environmental documents relating to these studies.

The forecast update process was initiated in October 1992, when a public hearing and a series of expert panel sessions were conducted to solicit input on forecast methodologies, aviation assumptions, and socio-economic assumptions. An additional expert panel session was conducted in May, 1993. During these sessions, issues were raised regarding the latest socio-economic projections, and uncertainties with various aviation assumptions. To address these uncertainties, alternative scenarios were included in the forecast update. These scenarios provide a range of forecasts higher and lower than the baseline forecast of airport activity through the year 2020.

Noise

Noise sensitive areas and facilities (residences, schools, parks, etc.) will be identified and analyzed to determine the noise impacts of the candidate sites. The effect of aircraft noise on stress-related health disorders will not be determined due to the lack of reliable data showing harmful effects. Future day and nighttime sound levels will be calculated and compared with existing levels, state standards and federal criteria. The future sound levels will be calculated, using the latest version of the Federal Aviation Administration's Integrated Noise Model (INM).

The noise analysis to be conducted will include contour analysis for Average Day-Night Level (DNL) and the State L_{10} descriptor, grid point analysis for time-above-threshold 85 dBA noise level and peak Sound Exposure Level (SEL), and aircraft overflights.

The DNL metric was developed under the auspices of the U.S. EPA for use in describing aircraft noise impacts and other environmental noise impacts. DNL is the logarithmic average sound level measured in decibels weighted to closely approximate the sensitivity of the human ear. It is based on the yearly average for a 24-hour Equivalent Sound Level (Leq). The metric is weighted to account for increased noise sensitivity between 10:00 PM and 7:00 AM with a 10 dBA (decibels on the A-weighted scale) penalty applied to noise events during that nighttime period. The output of the noise model includes a noise contour connecting points of equal noise level, which can be used to estimate the number of people and noise sensitive land uses within specified DNL sound levels. For this study, DNL 65 and DNL 60 will be used and will be applied to a conservative future year.

The $L_{10}65$ metric is used by the State of Minnesota in setting State noise standards. The L_{10} is based on a sound level (65 dBA) exceeded 10 percent of the time (6 minutes per hour). It is calculated for the worst hourly noise condition that could occur off each runway end. It says nothing about how often the condition actually occurs, but does show what short-term conditions could be in these areas.

The time-above-threshold (TA) is a measure of the time during a 24-hour day that a point on the ground experiences aircraft-generated noise above specified levels. The level of 85 dBA represents the point at which single-event (not DNL) levels are considered potentially disruptive. Unlike the DNL metric, which uses logarithmic averages in its internal calculations, the TA metric uses arithmetic means to calculate total noise. This latter technique can better demonstrate small changes in noise patterns, and can show changes in noise on a scale commensurate with changes in the number of aircraft overflights.

Peak Sound Exposure Level (SEL) is a calculation of the highest single aircraft A-weighted sound level at a specific point on the ground. Comparison of peak SEL for the various alternatives at the same geographic points shows various single-event impacts by alternative.

The analysis of aircraft overflights focuses on areas near the ends of runways. This analysis provides a straight forward comparison of runway use by alternative.

Noise abatement measures and land use compatibility measures will be considered for each MSP LTCP alternative. These include the rerouting of some flight tracks (especially departure tracks) over less noise-sensitive areas, and preferential runway use. Other measures will be considered as appropriate. A comparison of noise impacts for each alternative will be presented.

Energy Supply and Natural Resources

Energy requirements associated with the operation of MSP fall generally into two categories: 1) those relating to changed demands for stationary facilities (e.g. airfield lighting and terminal building heating), and 2) those involving the movement of air and ground vehicles.

Currently, electricity for facilities on MSP is purchased from Northern States Power Company. Current and future electricity use will be discussed and compared with the availability of electrical power and potential capacity constraints on MSP demand.

Existing and future uses of fuel by aircraft for each of the LTCP alternatives will be addressed in the AED.

For vehicular traffic accessing the airport, energy consumption may increase or decrease over time and by alternative, depending upon the vehicle mix and availability of transit serving the airport. Differences in travel distance and time between the current and future terminal sites can be translated into a difference in fuel consumption. Ground access travel information will be extracted from the Metropolitan Council regional highway network model to determine gasoline consumption for the existing and future configurations, including alternative locations of the terminal and airport parking. Where feasible, the SAPOLLUT model, created for estimating regional pollutant emissions, will be used to help in estimating differences in regional fuel consumption between the alternatives.

Land Use Compatibility and Impact on Local Comprehensive Plans

The off-site impacts report of the MSP Interactive Planning Group detailed land use impacts resulting from each of six MSP development concepts on the adjacent affected communities. Impacts ranged from no impact in Burnsville to major losses of commercial and/or residential development in Bloomington, Minneapolis and Richfield.

To refine the extent of local development impacts, the Metropolitan Council's existing land use compatibility guidelines will be used. The material presented in the Interactive Planning Group report will also be considered. (Although the Metropolitan Council intends to undertake a process to revise the compatibility guidelines, it is unlikely that a revised set of guidelines will be available within the timeframe established for the preparation of the AED.)

Social and Economic Community Impacts

a) <u>Residential, Business, and Non-Profit Organization Relocation</u>

The number of persons to be displaced will be determined, including detailed characteristics of the total number of persons impacted and sensitive populations (children, elderly, disabled, group quarters, etc.) which may require special relocation considerations. A profile of racial, income, family, and household characteristics will also be determined for each LTCP alternative.

Detailed 1990 U.S. Census Bureau information will be used, to the extent available, to obtain this information and as a supplement to other currently available data. The number of households to be displaced and their occupancy characteristics, including replacement valuation, and estimated supply and availability of replacement housing in the region, will be identified in general terms and ultimately determined in a detailed relocation study once the selection of a preferred candidate site occurs.

The number of businesses and employees to be displaced will be determined. Unique businesses (those that are site dependent for survival) will also be analyzed.

Non-profit organizations (places of worship, social service organizations) will be identified. An assessment of the impacts to these organizations will be presented in the AED.

b) Community Disruption; Induced Socioeconomic Impacts

The level of immediate and secondary community disruption associated with reducing or eliminating neighborhoods, businesses, roads and community facilities such as schools and places of worship, will be determined. The differences between the alternatives on the significance to the local area, metropolitan region and state, of this disruption (i.e., increased traffic, replacement facility requirements, taxable property valuation loss and valuation impacts to remaining areas, community identity fracturing) will be the product of this analysis. In addition, changes anticipated in population, households, employment, and other socioeconomic variables expected with the LTCP alternatives will be addressed.

Visual Impacts

a) Design, Art, and Architecture Application

An aesthetic analysis will be performed to identify daytime visual impacts, including an assessment of negative impacts to desirable (pleasing) vistas. On-site mitigation measures that incorporate design, art, and architectural features to screen undesirable vistas and enhance desirable views will be considered for the LTCP Alternatives. Items to be considered may include berming and landscaping. The level of analysis will be to the detail needed to differentiate between the LTCP Alternatives.

b) Light Emissions

The AED will identify anticipated types and locations of terminal, airfield and runway approach lighting and provide a brief description of light systems needed as to purpose, method of installation (pole or other ground mounted), beam angle, intensity, color, flashing sequence, and other pertinent characteristics common to anticipated lighting. Off-airport lighting, such as new roadway and intersection lighting, will be addressed. Measures to lessen annoyance, such as shielding and angular adjustments, will be identified.

Section 4(f)/6(f) Recreation/Public Land Impacts; NRHP-Eligible Sites

All Section 4(f) and 6(f) lands, including parks, recreation lands, trails, protected wildlife and waterfowl refuges of local, state, or national significance will be identified for the LTCP alternatives. Sites eligible for the National Register of Historic Places (NRHP) will be determined using data supplied by the Architectural, Archaeological, and Cultural Resources Analysis. Where there is no feasible and prudent alternative to taking such sites, the size, activities, patronage, access, unique or irreplaceable qualities, relationship to similarly used lands in the vicinity, or other factors necessary to determine the effects of the project and measures to minimize harm will be described.

Historical and Architectural Resources

It is assumed that the area of potential effect will consist of the existing site, additional land area to be acquired and the area within the DNL 65 noise contours for Alternatives 1, 2, 5 and 6. These contours extend over parts of Minneapolis, Richfield, Bloomington, Eagan, Mendota Heights, and the Fort Snelling Military Reservation. Before initiating archival research and fieldwork, the boundaries will be confirmed with the State Historic Preservation Office (SHPO), the Federal Aviation Administration, and the Metropolitan Airports Commission. In addition, project methodology will be discussed with the SHPO.

The study team will begin by reviewing previous reconnaissance surveys, other studies pertaining to the area's built environment, and appropriate SHPO files. This will provide background material on the study area and highlight properties already listed, or determined eligible for listing, in the National Register of Historic Places, as well as properties inventoried earlier. Because some of the survey work was done a number of years ago, the study team will complete an overview drive-through of all streets in the study area to note properties of potential interest not observed by earlier surveys. Based on archival and field review, gaps in survey coverage will be identified, and reconnaissance survey work will be undertaken as needed. Fieldwork will be supplemented by archival research at the Minnesota Historical Society, Hennepin and Dakota county historical societies, community libraries, local government offices, and other repositories as appropriate.

The survey will culminate in a report prepared according to SHPO guidelines. The report will list all properties in the study area that are on, or have been declared eligible for, the National Register, and will include recommendations of properties that appear to be eligible or that merit additional study to determine eligibility.

Archaeological Resources

The inventory of archaeological resources within the study area involved a thorough records and literature search followed by a field reconnaissance. As described in the Scoping EAW for this project, the study resulted in the identification of three archaeological resources:

Within Area A (the uplands east/southeast of Mother Lake in the northwestern portion of the airport property), on a wooded, lower terrace west of Duck Lake, scatters of late 19th/early 20th century debris, along with a number of depressions. The date and nature of these remains cannot be established without more intensive testing and records review.

Within Area B (the ravine between Post Road and the National Cemetery), on a lobe of high ground overlooking the valley, a Late Archaic-Early Woodland stemmed projectile point of chert. Surrounding tests proved negative and the place should probably be classified as a find spot. Such isolated findings or projectile points are not uncommon and may prove little more than that hunting took place within the area. The location is also somewhat peripheral to the proposed project area.

Within Area C (the southern portion of the Taylor Avenue complex), a consistent scatter of lithic debitage from tests placed at 10-15 meter intervals across the wooded grassy area between the barracks and the freeway. The evidence occurred throughout all levels, at times as deeply as 80-90 cm below surface. Occasionally, findings of more recent debris (e.g. glass fragments and rusted metal items) indicated a disturbed context, particularly in the upper levels, but much of the cultural deposit appears to be quite intact. If so, this site could produce valuable information relating to Native American use of this area prior to the period of Euro-American contact. An as yet unproven assumption is that it could also contain later, contact period evidence relating to the time of the Indian Agency, which was located a few hundred meters to the north/northeast. The lithic evidence thinned rapidly as testing progressed from the river towards the Taylor Avenue complex. The rest of the potentially affected portion of this complex has clearly been disturbed by late 19th/early 20th century construction and land use but may contain archaeological components relating to that era such as buried/filled in building sites.

As also discussed in the Scoping EAW, the field reconnaissance was limited to those areas that appeared reasonably undisturbed and could be investigated by means of standard archaeological survey procedure (surface inspection of exposed, deeply disturbed soil; systematic shovel testing of vegetation-covered areas). It is clear, however, from the literature and records search, that the entire airport area was affected by activities associated with Fort Snelling, both the original 1819 fort and the southwestern portion (Department of the Dakotas/Taylor Avenue) that was built after the Civil War. There was a strong Native American presence in the area, particularly during the time of the Indian Agency (1822-1858). In addition, it is clear from archaeological evidence in the general area that the Minnesota/Mississippi river valleys with adjacent uplands were quite intensively used also by earlier Native American populations. It seems likely, therefore, that a number of archaeological resources were deeply disturbed during the construction of the airport. It is also possible, however, that portions of undisturbed cultural deposit could have survived in areas that have been filled rather than graded.

Of the three archaeological sites, the ones by Duck Lake (A) and east of Taylor Avenue (C) will be further studied in order to better determine their horizontal and vertical extent, define their cultural affiliation and assess whether they hold enough research potential and historic significance to meet National Register criteria. In both cases, this will involve more detailed records search as well as some formal archaeological testing.

As an isolated find, the projectile point from Area B appears to hold minimal research potential and the area does not seem to warrant further investigation, particularly in view of its very peripheral location which probably would not be affected by any of the proposed airport concepts.

As far as more disturbed, as yet untested portions of the study area are concerned, it will be necessary to assess, prior to any construction, whether or not any significant segments of undisturbed archaeological deposit still exists under filled and/or asphalt covered areas. As such measures would be both costly and disruptive in terms of airport use, they may need to be carried out at a later stage, once specific construction areas have been identified.

Wetlands

As the level of design detail for each LTCP alternative increases, it will be possible to refine the wetland impact estimates contained in the Scoping EAW. A more detailed wetland impact analysis will be prepared for the AED which provides the cumulative acreage affected, the wetland types affected and the relative level of sensitivity and/or degradation of affected wetlands. Once these impact estimates have been refined, measures to reduce wetland impacts will be explored, the magnitude of necessary wetland replacement will be quantified and replacement options will be evaluated. Any wetland replacement concepts will be developed in a manner which recognizes the bird-aircraft hazard potential of certain wetland types.

Minnesota Valley National Wildlife Refuge/Fort Snelling State Park

a) Essential Bald Eagle Habitat

The Minnesota River Corridor south and east of MSP is utilized by bald eagles (Federal threatened species) for nesting, as a migration route and as a wintering area when ice conditions are appropriate. The LTCP alternatives will involve river overflights at various altitudes depending on the orientation of runways and their distance to the river. As part of the AED, an analysis will be prepared which documents the approximate location, frequency and altitude of anticipated overflights and compares this data to known eagle use areas along the river corridor. Of primary importance is the potential for impacts to nests and traditional night-roosting locations.

As part of this analysis, coordination will be undertaken with the MDNR Nongame Program and the U.S. Fish and Wildlife Service to determine what data presently exists as to eagle use areas within the MVNWR, Fort Snelling State Park and the adjacent reaches of the Minnesota River. The relative potential for adverse aircraft noise and disturbance impacts upon eagles will be analyzed for each of the LTCP alternatives based on: (1) the distance from the nearest runway end for each Concept to the eagle habitat component being analyzed, (2) the approximate altitude of aircraft as they would pass nearest the eagle habitat component being analyzed, (3) the approximate distance between the nearest approach and departure flight tracks to the eagle habitat component being analyzed, (4) the number of aircraft using flight tracks found to be in close proximity to eagle habitat components and (5) approximate disturbance thresholds for nesting and night-roosting eagles based on the scientific literature. Should any of the LTCP alternatives have the potential for causing adverse impacts to bald eagles, potential mitigation measures will be also explored.

b) Human Use Areas

MVNWR staff have indicated their concern regarding the potential for noise and disturbance impacts to refuge visitors utilizing the MVNWR's primary human use areas. In order to analyze the relative potential for such impacts among the LTCP alternatives, additional coordination will be undertaken with MVNWR staff to obtain maps and visitation records for areas of concentrated human use (e.g. trails, areas used for environmental education, visitor center, etc.) within the refuge. Additional information is being collected on Fort Snelling State Park. For each alternative, aircraft operations overflying each identified human use area will be analyzed as to the projected number of flights and approximate altitudes and distances. The relative potential for impacts among the various alternatives will be analyzed based on the number and proximity of overflights, the sensitivity of each identified human use to disturbance, and the approximate number of visitors engaged in the identified use.

c) Major Waterfowl Concentration Areas

Several major waterfowl concentration areas are currently subject to frequent aircraft overflights, particularly Gun Club Lake. Any of the LTCP Alternatives under consideration would change the number and distribution of operations overflying these and other major waterfowl concentration areas in the Minnesota River floodplain. In order to address the potential for noise and disturbance impacts to waterfowl and waterbirds in such areas, the results of the bird-aircraft hazard analysis (see the following Bird-Aircraft Hazards discussion) will be compared to any noise or disturbance thresholds that have been identified for waterfowl or other waterbirds (e.g. herons, egrets, etc.) in the scientific literature.

Bird-Aircraft Hazards

While bird strikes often occur at random, they are more likely to occur around areas where birds concentrate in large numbers. The primary bird concentration areas around MSP are Mother, Gun Club and Snelling Lakes. Long Meadow and Black Dog Lakes are also major waterfowl

concentration areas but are farther from MSP. The AED will include a detailed analysis of potential bird-aircraft hazards related to each of these bird concentration areas in relation to the LTCP alternatives being considered. Coordination will be undertaken with the MDNR and the U.S. Fish and Wildlife Service to obtain any available bird population and movement information relating to the identified bird concentration areas. The potential for bird-aircraft conflicts associated with each alternative will be analyzed based on the following:

(1) past bird strike incidents based on FAA/MAC records;

(2) existing population estimates/surveys and movement data for waterfowl and wading birds (e.g.herons and egrets) based on MDNR and U.S. Fish and Wildlife Service records;

(3) proximity of overflights to bird concentration areas based on projected aircraft arrivals and departures, flight tracks and altitudes; and

(4) relative seasonal and temporal distribution of bird and aircraft movements.

The results of the above analysis will used to provide a comparison of the LTCP alternatives with regard to their relative bird strike hazard potential. If potential bird-aircraft hazards are identified, potential mitigation measures will be explored.

Impacts on Local and Regional Transportation Systems

The traffic impact analysis will address the impact of airport traffic on the regional transportation system. The network for each alternative will replicate as closely as possible that identified in the 1991 Minneapolis-Saint Paul International Airport Long-Term Comprehensive Plan (MSP LTCP). The most current available socio-economic data will be used as the basis for trip generation. The best available regional travel demand forecast model will be used in the analysis. Information gathered by the 1990 Travel Behavior Inventory Special Generator Study of the airport will be used as needed. The potential opportunity for induced development for the alternatives will need to be assessed. Changes and impacts of truck traffic will be analyzed, as well as opportunities for alternative modes for freight service.

Modeling, using capacity constrained techniques, will be conducted for both daily and peak-hour conditions. The impact of the directional distribution on road capacities will be evaluated for the peak hour. An analysis will be performed to identify the routes used by airport traffic. Issues to be addressed include an evaluation of the validity of the improvements proposed by the 1991 MSP LTCP (including laneage required to meet forecast demand and interchange requirements), analysis of the impacts on the bridges across the Minnesota and Mississippi Rivers that serve the airport area, and an evaluation of the regional accessibility of the site in the terms of travel times and distance for each scenario. Alternative modes for providing access for passengers will be analyzed that might differ between the alternatives under consideration.

Air Quality

Existing (1993) and future (2020) emissions and concentrations of CO, particulates, HC, NO_x and SO_2 will be examined in the AED to the extent that there are substantive differences between the alternatives.

CO emissions and concentrations will be examined for both on-airport (i.e. aircraft, stationary sources, roadways and parking) and off-airport traffic sources for each LTCP alternative considered in the AED. CO is the only pollutant for which a microscale air quality analysis will be performed for off-airport sources (access roadways). For the microscale analysis vehicle emissions will be projected using the MOBILE 5A emissions model (adjusted by MnDOT to the Twin Cities Metro Area vehicle mix) except for idle emissions which will be based upon MOBILE 4.1 as currently recommended by the U.S. Environmental Protection Agency. CO concentrations will be estimated using the CAL3QHC highway queuing and dispersion model. Air quality guidelines established by the Metropolitan Council will be used to identify critical intersections for which a microscale CO analysis will be performed based on information from the regional highway network. The objective of the CO analysis is to assess compliance with ambient CO standards. Background CO levels will be estimated from monitoring that has been performed for other projects within the MSP study area. Mitigation measures will be considered as needed. Any new requirements contained in the soon-to-be-released US EPA air quality guidelines will also have to be addressed in the AED.

Concentrations of other criteria pollutants will be estimated using the FAA Emissions and Dispersion Modeling System (EDMS) airport air pollution model. Background levels of relevant pollutants will be estimated for 1993 and the 2020 projection year. For this model, aircraft/engine categories will be selected that are consistent with assumptions used in the 1990 CO emissions inventory prepared by the Minnesota Pollution Control Agency. Inputs to the model include mobile sources on the airport (aircraft operations, engine runups, vehicular traffic and parking) and stationary sources. The modeling will build upon the preliminary work already completed by HNTB for the Interactive Planning Group Study. Annual meteorological data (Surface Observations) for MSP for 1992 will be used for the EDMS model. Both annual and hourly modeling may be undertaken in the AED. Both on- and off-airport receptor sites (centers of human activity, industrial, commercial, residential, and recreational (such as golf courses) will be examined with this model.

Background concentrations for the other criteria pollutants will be based upon available monitoring and modeling data for these pollutants. Overall concentrations (local contribution plus background) will be compared with appropriate ambient air quality standards.

Regional emissions of CO will be estimated for the existing and future alternative highway networks using the Metropolitan Council regional highway network and the SAPOLLUT emissions model.

Consistency with the State Implementation Plan (SIP) will be addressed in the AED. Of primary concern are expected differences in local comprehensive plans from those that were in place when the SIP was adopted in 1982.

The potential for mitigation of emissions and concentrations through the use of reduced source emissions and transportation strategies on and off the airport will be addressed in the AED. These measures may include expected changes in technology as well as changes in operations and traffic management programs. The availability of transit to reduce automobile trips will also be addressed.

Stormwater Discharge

Long term expansion of MSP by any of the LTCP alternatives will significantly increase the volume of stormwater generated at the overall facility as well as the loading of problem materials into the site runoff. Extensive monitoring is currently in place at MSP which will be utilized in the characterization of current MSP runoff as a baseline. Stormwater flow and quality profiles will be projected for each of the alternatives and will be compared against current stormwater flow and quality.

MAC is currently operating under NPDES Permit No. 0002101 which expires on September 30, 1995. The MPCA has indicated future permits will likely have much more stringent discharge limitations. However, these limits are not known at this time and probably will not be known at the time the AED is prepared.

Water-Related Land Use Issues

The four alternatives do not require any significant construction to occur in the Minnesota River floodplain other than for runway lighting which may be required for Alternatives 1 and 2.

Each of the four alternatives will involve encroachment upon and possible elimination of surface water bodies, including designated protected waters of the State of Minnesota. While the MSP airport is part of neither the Minneapolis nor Richfield Shoreland Management Districts and the water bodies on the MSP airport have no recreational uses or access, permits may be required from the DNR and other regulatory bodies to conduct filling or building nearer than the setbacks established in the statewide minimum standards. As the level of design detail for each alternative increases, a wetland impact analysis will be completed and measures to minimize shoreland and wetland impacts will be explored.

Soils/Geology/Hydrogeology

A substantial amount of information exists concerning the geology and hydrogeology of the MSP airport site. Each of the LTCP alternatives will involve the construction of facilities on the western side of the MSP site where the perched water table is absent and the uppermost water table aquifer occurs in the St. Peter Sandstone or unconsolidated sediments occupying a bedrock valley. The sources and potential quantities of additional toxic or hazardous materials to be

generated will be characterized and the potential for impacts to deeper potable aquifers and to the Minnesota River will be assessed for each of the alternatives. Procedures for prevention, containment, and management of spills and other surface and subsurface contamination will also be discussed in the AED to the extent that there are differences between the alternatives.

At this time, the requirements and equipment for heating and cooling of the supplemental terminal and support facilities for the various alternative development concepts are undefined. The MSP airport currently appropriates groundwater from several production wells on site for non-contact cooling during the summer months. Alternative methods are being evaluated, and it is anticipated that this use will be reduced or eliminated within the next several years. The need and availability of additional or reduced groundwater appropriations will be evaluated and the impact of any additional appropriations on the quantity of groundwater available to surrounding communities and other nearby users will be determined through the use of groundwater modelling.

ISSUES AND IMPACTS NOT REQUIRING DETAILED ANALYSIS

The following issues and impact areas have been determined to be not significant and therefore will not be analyzed. It should not be inferred that these issues/impact areas are less important than the others. If potentially significant impacts are identified during preparation of the AED, they will be analyzed in detail and mitigation measures will be determined.

Wild and Scenic Rivers

The lower Minnesota River is not designated as a wild or scenic river land use district and expansion of the airport would not be expected to significantly affect the public use and enjoyment of any other river designated as wild or scenic in the State of Minnesota.

Stress-Related Health Disorders

In its Policy Report of August 1992, the Federal Interagency Committee on Noise (FICON) stated that "... the issue of whether significant non-auditory health effects result from aircraft noise still remains and requires additional research".

The material in the FICON Technical Report noted that studies of health effects of aircraft noise in residential areas have produced conflicting results. Most studies which have controlled for multiple factors such as age, socioeconomic profiles, and other health risk factors, have shown no, or very weak association between noise exposure and non-auditory health effects.

Water Surface Use

The airport development concepts being considered are expected to have no impact on the number or type of watercraft operating on any water body.

Abandonment of Residential and Groundwater Monitoring Wells

Each of the LTCP alternatives will involve the abandonment and possible replacement of several residential and groundwater monitoring wells. Abandonment and construction of residential and groundwater monitoring wells will be conducted in accordance with Minnesota Department of Health procedures as codified in Minnesota Rules, Chapter 4725, and therefore require no further analysis.

The following issues and impacts are essentially the same for each LTCP alternative and will therefore not be analyzed in the AED. They will require detailed analysis in the EIS. If significant differences between alternatives are identified, then a detailed analysis will be performed in the AED.

- Water supply and impacts on the Minneapolis water system.
- Wastewater treatment, discharge, impacts and mitigation measures.
- Regional transit service.
- Solid and hazardous waste disposal.
- Regional air quality analysis for conformity with the State Implementation Plan and the Clean Air Act Amendments.
- On-airport construction impacts (noise, dust, runoff, etc.).
- Glycol deicing fluid treatment, discharge, and mitigation measures.

V. PUBLIC AND AGENCY INVOLVEMENT

PUBLIC AND AGENCY INVOLVEMENT

Two advisory committees have been formed to monitor and provide input on technical and policy issues relating to the preparation of the LTCP update and AED for MSP -- the MSP Technical Advisory Committee, and the Dual Track Task Force. The MSP LTCP Technical Advisory Committee is comprised of staff representatives of the affected cities, counties and regional, state and federal agencies, and representatives of airport users and local interest groups. The Technical Committee will review the technical approach and products of the process.

The Dual Track Task Force is comprised of elected officials or representatives of the affected cities, townships, county, regional, state and federal agencies, airport users and local interest groups. The Task Force will review the process and products for MSP and the New Airport technical and environmental studies, and will provide policy advice to the MAC.

The State Advisory Council established by the legislature will be kept informed of the progress of the study. The general public will be kept informed through a series of public information meetings, newsletters, informational brochures, press conferences and news releases, as appropriate. They will have opportunities to comment both informally and formally. Formal input will be solicited at the AED public hearing. Informal input from the public can be provided at meetings of the advisory groups, and at public information meetings which will be scheduled at key points in the study. The MAC contact person and/or its consultant will be available to provide information and receive input throughout the study.

SCOPING PUBLIC MEETING

A public meeting was held Tuesday, February 15, 1994 at Washburn High School in Minneapolis, Minnesota and the Scoping EAW and Draft Scoping Decision Document were presented. Approximately 17 persons attended, of which 6 made comments. A transcript of the meeting is available for review at the MAC offices.

The comment period ended March 2, 1994 and 11 written comments were received. The comments and responses are presented in Appendix A.

15252/SDD

APPENDIX A

SUMMARY OF COMMENTS ON THE

SCOPING DOCUMENTS AND RESPONSES

Appendix A is a summary of responses to substantive written and oral comments on the Scoping EAW and Draft Scoping Decision Document. Comments were received at the scoping public meeting and by mail during the comment period. All written comments and a transcript of the public meeting are available for review at the Metropolitan Airports Commission offices.

GENERAL RESPONSE TO COMMENTS

Several commenters raised issues, concerns or impacts that are important to comparing the MSP LTCP with the New Airport Comprehensive Plan and the "no action" alternative -- but are not pertinent to the selection of the best long range comprehensive plan (LTCP) for MSP. The Alternative Environmental Document (AED) for the MSP LTCP will address all identified issues, concerns and impacts that relate to the selection of the best MSP LTCP alternative. The level of analysis in the AED will focus on the differences between the four LTCP alternatives. Issues, concerns and impacts relevant to a decision between a potential new airport, development of the existing airport, the no action alternative, and other feasible alternatives will be evaluated in the EIS at a later stage in the process.

The following is a summary of oral and written comments received at the public scoping meeting	Response
1. Include Personal Rapid transit (PRT) technology in the planning of MSP and the New Airport as a means of accessing the airport without using the private auto.	1. Regional transit issues will be addressed in the EIS.
2. MAC should not be the preparer and reviewer of the environmental documents for MSP; there should be an independent reviewer.	2. The process is consistent with the EQB Rules and was approved by the EQB on March 19, 1992.
3. The format of the EAW is too narrow and tends to support a preferred alternative.	3. The EAW format is the EQB adopted format for scoping an EIS.
4. Ground level noise impacts on adjacent residential properties should be determined.	4. These impacts will be addressed.
5. Runway 4-22 extension should be considered an alternative rather than a baseline condition.	5. The Runway 4-22 Extension is in the MAC 1994-2000 Capital Improvement Program and is considered a part of each LTCP alternative.
6. Noise impacts should be based on the actual data from ANOMS, rather than the FAA modeling numbers.	6. The function of ANOMS is to collect, organize, and report aircraft noise and operations events. Forecasts, projections, or analysis of future noise conditions is not possible with ANOMS. The FAA's Integrated Noise Model (INM) is one of the accepted tools for conducting analysis of future noise conditions around an airport. ANOMS data will be used, where applicable, to formulate and validate the inputs to the INM.

The following is a summary of oral and written comments received at the public scoping meeting	Response
7. MAC should have an oversight group composed of elected officials from the noise-impacted communities.	7. MAC has established a Task Force with elected officials or their designated representatives from the affected communities.
8. For passenger enplanements, clearly state whether this includes non-revenue passengers; look at what the effects would be if Northwest Airlines emulates the Southwest Airlines experience of providing more point-to-point service rather than hubbing.	8. The type of passenger will be stated (the forecasts only consider revenue passengers); the effects of less hubbing is one of the forecast scenarios.
9. What happens if NWA can't meet the federal mandate for the phase-out of stage 2 aircraft by the year 2000.	9. The forecasts and noise modeling assume none of the airlines will meet the year 2000 phase-out deadline for Stage 2 aircraft. According to the National Noise Policy, an airline need only have 85 percent Stage 3 aircraft and apply for a waiver which would allow three more years to meet the 100 percent Stage 3 deadline. The expert panels on forecasting recommended this conservative assumption of 85 percent Stage 3 for MSP for the year 2000; and the forecasts incorporated their recommendation.
10. What are the effects if MSP has to abide by the state noise standards.	10. The impacts of the state noise standards will be addressed. The issue of abiding by the standards would be considered in a separate forum (e.g., permitting process).
11. "Safety" should be listed as an issue, especially if there is a crash off of the airport and there is reliance on city fire trucks not equipped to handle an airplane fire.	11. Public safety has been added as an issue; it was not listed because it has always been a major consideration in all airport decisions.
12. Will MAC evaluate property tax dollars lost to a community based on a historical comparison over time or a comparison of the noise-impacted property with property outside the noise area.	12. Property tax dollars lost to a community will be based on current evaluations of property proposed for acquisition. Loss in potential property value due to noise has not been upheld by the courts.

Minnesota Pollution Control Agency

March 3, 1994

Mr. Nigel Finney
Deputy Executive Director
Planning and Environment
Metropolitan Airports Commission
6040 28th Avenue South
Minneapolis, Minnesota 55450

Dear Mr. Finney:

RE: MSP Long Term Comprehensive Plan Alternative Environmental Document - Draft Scoping Document

Thank you for the opportunity to comment on the draft scope for the Alternative Environmental Document(AED) for the Minneapolis/St. Paul International Airport (MSP) site. The scoping document outlines a comprehensive and ambitious environmental review. The Minnesota Pollution Control Agency (MPCA) staff have just a few comments.

First, the AED should look at all land uses that fall within the applicable L10 contour levels, and not just focus on the L10 65 dBA used for residential land uses. For example, commercial land uses located within the L10 70 dBA contour should also be identified. **A.**

Second, the MPCA concurs that a detailed traffic analysis is needed to fully assess the traffic impacts of the MSP airport expansion alternatives. The MPCA staff should be involved in scoping the traffic impact study and in locating receptor sites. The detailed air quality analysis should include aircraft emissions as well as motor vehicles emissions. **B.**

Finally, in nonattainment areas such as the Twin Cities, the Clean Air Act Amendments of 1990 require all regionally significant highway projects to be part of a regional air quality analysis. The projects must show a reduction in emissions and conformity with the State Implementation Plan. The highway improvements described in the scoping document meet the definition of regionally significant and must be part of a regional air quality analysis to be performed by the Metropolitan Council. If the improvements show an increase in emissions, then federal funding cannot be used to build them. In addition, if the detailed traffic impact study recommends additional highway improvements (i.e., off-site signalization), these may have to go through a localized emissions analysis. **C.**

We appreciate the opportunity to participate in the dual track airport selection process and look forward to receiving responses to our comments. If you have any questions regarding our comments, please contact Kathryn Kramer of my staff at (612) 297-8604.

Sincerely,

Paul Hoff

Paul Hoff, Director
Environmental Analysis Office
Administrative Services Division

PH:jr

A. This will be done.

B. A detailed traffic and air quality analysis will be performed in the AED for the LTCP alternatives. Coordination with potentially impacted communities and governmental agencies responsible for transportation planning will be part of the study. The location of receptor sites and other air quality issues will be coordinated with MPCA.

C. A comparison of emissions with existing conditions as required in the conformity rules, the No-Build Scenario and the New Airport will be made in the EIS. The MSP LTCP AED will address differences in emissions associated with LTCP alternatives.

Minnesota Department of Transportation
Office of Environmental Services
3485 Hadley Avenue North
Oakdale, MN 55128
(612) 779-5072 FAX (612) 779-5109

612-779-5071

March 4, 1994

Nigel Finney
Deputy Executive Director
Metropolitan Airports Commission
6040 28th Avenue South
Minneapolis, Minnesota 55450

SUBJECT: Long-Term Comprehensive Plan (LTCP), Scoping Environmental Assessment Worksheet and Draft Scoping Decision Document for MSP

Dear Mr. Finney:

The Minnesota Department of Transportation (Mn/DOT) continues to have a strong interest in the airport decision process. Mn/DOT has completed its review of the above referenced document and offers the following comments for your consideration in subsequent project development.

The Draft Scoping Decision Document correctly lists "Impact on the regional transportation system (highways and transit)," as an issue to be studied in the forthcoming Alternative Environmental Document (AED). The transportation issues proposed to be analyzed include:

- Travel demand forecast and route selection.
- Induced development
- Validity of improvements proposed in the 1991 MSP LTCP.
- Analysis of river bridge traffic capacity
- Regional accessibility (travel times and distance).

Please include freight movements in the proposed analysis of travel demand forecast and route selection. The airport is a major generator of freight movements. **A.**

Should the dual track process ultimately select an expansion of the existing airport, the greatest impact to the regional transportation system will result from construction of a west airport terminal (Alternatives 2, 4, & 6). The infrastructure needed to provide surface access to a new or reconstructed terminal would be a substantial development in itself. The AED should provide an analysis of the following:

- Additional lanes on existing highways required to meet demands to either the east or west terminal. **B.**

- New and reconstructed interchanges required to provide access to either the east or west terminal.

- Alternative modes that could be utilized to provide passenger and freight service to the airport and reduce demand on the regional highway system, and how other modes could be designed to service the airport. **C.**

- Secondary impacts to the social, economic, and natural environment, resulting from construction of transportation improvements needed to serve an expanded airport. **D.**

The Department also requests that a design alternative be analyzed which would maintain the existing primary surface access to the airport (T.H.5), with construction of a west terminal. This sub-alternative would minimize disruption of the regional transportation system, reduce the infrastructure investment required to serve a west terminal, and minimize the impacts to surrounding communities from an expanded transportation system. **E.**

The current Federal Intermodal Surface Transportation Act (ISTEA) places a restriction on construction of additional capacity in nonattainment areas which are Transportation Management Areas, such as the Twin Cities, unless such improvements are part of an approved Congestion Management Plan. While the laws or policies in effect if and when these airport and ground access improvements are built are unknown, it is probable that such laws will be at least as stringent as present law and rule. The AED should evaluate conformity with the Clean Air Act Amendments (CAAA) and recently issued Conformity Rules. **F.**

If you have any questions or require further information please do not hesitate to call. The department has actively participated in the dual track process and stands ready to assist in reviewing the options for ground access as part of AED development.

Sincerely,

Lawrence E. Foote

Dr. Lawrence E. Foote
Director, Office of Environmental Services
and Chief Environmental Officer

A. A. This has been included (see p. 15).

B. B. These have been included (see p. 15).

C. C. Alternative modes will be addressed in the EIS.

D. D. Secondary impacts to the Social, Economic, and Natural Environments will be identified in the MSP LTCP AED. Such impacts will include qualitative evaluations, where possible, of *indirect* impacts that would be expected to result *after* the development of one of the LTCP alternatives. These may include impacts associated with induced development, impacts on remaining residential/business areas (after adjacent areas have been acquired for airport development), changes in accessibility (increased or decreased), and impacts to the natural environment (for example, possible watershed changes or wildlife habitat areas).

E. E. This design alternative was evaluated during the preparation of the LTCP in 1991. It would require extensive tunneling for the access roadways and was determined impractical because of the cost and disruption during construction.

F. F. See Response C. for MPCA.

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

500 LAFAYETTE ROAD • ST. PAUL, MINNESOTA • 55155-40 10

DNR INFORMATION
(612) 296-6157

March 2, 1994

Jenn Unruh
Metropolitan Airports Commission
6040 28th Avenue South
Minneapolis, MN 55450

RE: Dual-Track Airport Planning Process
MSP LTCP Scoping EAW and Draft Scoping Decision Document

Dear Ms. Unruh:

The Department of Natural Resources has reviewed the Scoping EAW and Draft Scoping Decision Document for the Minneapolis-St. Paul Airport Long Term Comprehensive Plan Alternative Environmental Document (AED). In general, the proposed scope should address our areas of concern. We would, however, like to offer the following additional comments for your consideration.

Section III of the Draft Scoping Decision, "Summary of Issues and Concerns", lists "Impact on natural habitat and wildlife" as an issue to be included in the AED. However, this issue is not described in further detail in Section IV, "Analysis of Issues and Impacts". We would like to confirm a comprehensive analysis of habitat and wildlife impacts will occur.

Although we understand the Scoping EAW will not be revised, the following information concerning Item 11b should be considered during AED analysis and preparation.

Colonial Waterbird Nesting Site: The department's Natural Heritage Database contains a record for a Colonial Waterbird Nesting Site at Mother Lake. Forster's Terns and Black Terns have been periodically observed nesting at the lake since 1945. Forster's Terns, a state Special Concern species, last nested at Mother Lake in 1986, a year during which the water level rose 16 centimeters in one week. Fluctuating water levels from run-off likely played a role in the terns' inability to successfully fledge young at Mother Lake during the last few years they nested at the site, and may have contributed to subsequent site abandonment.

Bald Eagle breeding territories: The eagle "nest" on Long Meadow Lake, referenced on page 13 of the Scoping EAW, should be referred to as an active Bald eagle breeding territory that consists of three known nest sites. In the same sense, the "nest" thought to occur at Louisville Swamp should be referred to as a breeding territory.

The locational and historical information for the three nests in the Long Meadow Lake area is inaccurate. The three nests in this breeding territory are within one mile of each other. The first nest is located at Long Meadow Lake. This nest was occupied by adult eagles in 1986 and 1987, but *nesting* did not occur during those years. The eagles actively nested at this site from 1988 to 1991; two young eagles were produced by the pair in 1989 at this nest. In 1992, the eagles nested at Gun Club Lake, approximately one mile northeast of the Long Meadow Lake nest. Two young produced that year were killed when the nest blew down in a wind storm in June of 1992. In 1993, the eagles nested and successfully fledged one young on the Minnesota River, about halfway between the two previously-used nests.

The Scoping EAW is correct in stating that no traditional winter night roosting sites are *known* to exist within the Minnesota Valley National Wildlife Refuge (page 13 of the Scoping EAW). However, it is not known where eagles feeding at Black Dog and Long Meadow lakes during the winter months go to roost at night. On January 9, 1994, ten eagles were observed in the Minnesota River Valley east of Interstate 35W during the annual Mid-Winter Bald eagle survey conducted by department Natural Heritage and Nongame Research staff. This is the highest number of eagles seen in this part of the valley in the past five years. We need to determine where these birds roost at night, and if they move between the Black Dog/Long Meadow Lake area and the Pig's Eye wintering area. We are not sure that these birds travel from Black Dog/Long Meadow Lake to the known winter roost site at Pig's Eye. It is possible that a night roost exists in the Minnesota River Valley, closer to the Black Dog/Long Meadow Lake area where these eagles are feeding.

We are pleased to see that potential impacts to rare natural features will be analyzed in the upcoming AED. The proposed analysis of potential impacts to Bald eagle nesting and night roosting sites referred to in the Draft Scoping Decision Document (Section IV, pages 13 and 14) is commendable.

A. A. The AED for the MSP LTCP will include a general analysis of potential impacts to wildlife and wildlife habitat within airport boundaries. Because of the limited amount of undisturbed upland wildlife habitat within the MSP boundaries, this analysis is expected to focus largely on wetland-related wildlife. However, all upland areas within MSP potentially affected by the LTCP will be field reviewed to determine if significant upland wildlife habitat is present and how future airport improvements would affect wildlife species using such areas. The analysis of potential off-site wildlife impacts will be limited to bald eagles, major waterfowl concentration areas, likely bird-strike conflict areas and areas used by colony-nesting birds.

B. B. The additional information provided by the MDNR has been included in the Scoping Decision Document as Appendix B. All data on file with the Natural Heritage Program regarding the use of Mother Lake by colony-nesting birds will be reviewed and an analysis of impacts carried out in the AED. The potential for controlling fluctuating water levels in Mother Lake will be explored. However, preliminary information on the hydrology of Mother Lake suggests that it receives very little water from property controlled by MAC and that most of its inflow comes from Trunk Highway 62 and surrounding residential neighborhoods. In the event that water level control could be accomplished, it would need to be done in a manner that does not exacerbate the potential for bird-aircraft hazards. Additional coordination will be undertaken with the MDNR Nongame Program to explore this issue further so that it can be adequately addressed in the AED.

C. C. Areas used by bald eagles for nesting will be referred to as breeding territories in the AED (also, see Appendix B). Data on bald eagle nest locations and utilization was obtained via discussions with the staff at the Minnesota Valley National Wildlife Refuge. However, some misinterpretation apparently occurred and we concur that corrections are necessary. MDNR Natural Heritage Program files will be reviewed during the preparation of the AED and all data on documented bald eagle use in the MVNWR will be cross-referenced against data obtained from the U.S. Fish and Wildlife Service. Confirmation that nest locations are correct will be obtained from both the MDNR and U.S. Fish and Wildlife Service prior to undertaking the analysis of potential aircraft disturbance impacts on bald eagles to be included in the AED.

To determine if and where roosting sites exist in the Minnesota Valley, we suggest the MAC fund a department Nongame Program survey for winter night roosting sites in the Minnesota River Valley during the winter of 1994-95. We understand survey results would not be available for inclusion in the AED, which is to be completed in November this year, but would be useful in the Environmental Impact Statement comparing impacts among the Minneapolis-St. Paul expansion, new airport development, and other alternatives. Please contact Ms. Joan Galli, the Nongame Wildlife Specialist for our Metro Region at (612)297-2277 to discuss this issue.

D.

D. MAC is interested in obtaining this information and will contact Ms. Galli.

Thank you for the opportunity to review this document. Please contact me with any questions regarding these comments.

Sincerely,

Rebecca A. Wooden
Environmental Planner
Office of Planning
(612)297-3355

Copy List

Kathleen Wallace
Pete Otterson
Steve Colvin
Joan Galli
Joe Hiller
Brian McCann
Nancy Albrecht
John Lilly
John Pauley
Jan Shaw Wolff
Gregg Downing, EQB
Charles Kenow, EQB

MINNESOTA HISTORICAL SOCIETY

March 2, 1994

Mr. Nigel D. Finney
Metropolitan Airports Commission
2040 28th Avenue South
Minneapolis, Minnesota 55450

Dear Mr. Finney:

Re: Minneapolis-St. Paul International Airport Long-Term Comprehensive Plan
SHPO Number: 94-0681

Thank you for the opportunity to review and comment on the above project. It has been reviewed pursuant to the responsibilities given the State Historic Preservation Officer by the National Historic Preservation Act of 1966 and the Procedures of the Advisory Council on Historic Preservation (36CFR800).

Our comments on the Scoping Worksheet and the Draft Scoping Decision Document are as follows:

1. With most projects, the proper coordination between the NEPA process and the 106 process is that all identification and National Register evaluation of historic properties should be completed at the draft EIS stage. This information is then used to evaluate the effects of the project, and, if adverse effect are identified, appropriate avoidance or mitigation measures are considered and a memorandum of agreement is developed (if needed) and included in the final EIS. Because of the complex and lengthy nature of this project, we would strongly recommend that a detailed schedule for 106 compliance activities be developed, with reference to the overall project review schedule which has already been circulated.

A. A. A detailed schedule will be developed to outline Section 106 compliance activities in relationship to the overall project review schedule.

2. We would strongly recommend that the Area of Potential Effect (APE) for historical and architectural resources and for archaeological resources be reviewed and approved by the Advisory Council on Historic Preservation at an early stage in the review process. This is particularly important because the APE for this project involves questions of potential impact from noise and other "secondary" factors, and because the planning process is of a unusually long duration.

B. B. The Federal Aviation Administration will respond to this recommendation.

3. In conjunction with these documents, we have reviewed the report of the initial history/architecture survey prepared by Hess Roise in December 1992.

A. We concur that the Ft. Snelling District retains integrity and eligibility to the National Register.

B. We concur that the Air Force Reserve Base merits further evaluation in order to determine National Register eligibility. This study should pay particular attention to the heating plant and related heating system.

C. We concur that the Original Wold-Chamberlain Terminal District merits further evaluation in order to determine National Register eligibility. This study should include a specific consideration of the historical associations of buildings P-1 and T-46 with the other buildings in the district.

D. We feel that the information included in the inventory is sufficient to determine that the St. Kevin's Complex is not eligible for the National Register, and we do not feel that further evaluation is necessary.

E. We concur that the other areas covered by this report do not appear to contain history/architecture resources that qualify for the National Register or that merit further study.

F. We concur with the general approach outlined in the Draft Decision Document for completing additional survey in areas outside those covered by the initial survey, and for completing the above referenced evaluations. We do note that the document indicates that the survey will include recommendation of properties that appear to be eligible or that merit additional study to determine eligibility. Please note that any survey report that recommends further study to complete evaluations will need to be returned by our office with a request to complete the evaluations. We cannot complete an assessment of project effect without completed evaluations.

C. C. The first phase of the evaluation will examine areas that have not been covered by recent reconnaissance-level surveys, and will conclude by recommending properties that appear to be eligible for the National Register or that merit additional study to determine eligibility. These recommendations, along with recommendations from a previous reconnaissance survey of the airport and vicinity, will be the basis for an intensive-level survey, which will result in final National Register determinations.

4. We have not yet had the opportunity to review the report of the initial archaeological survey of the airport area. However, the following factors need to be kept in mind regarding subsequent archaeological investigations:

A. A comprehensive long-range Research Design for archaeological survey for the project still needs to be developed and documented. The Draft Decision Document discusses a number of factors that need to be considered in this research design.

D. D. A long-range research design will be prepared.

B. The Scoping Worksheet delineates the APE for archaeological resources as those areas which will be subjected to ground disturbance. In order to cover the potential alternative of building a new airport and abandoning the current airport, the APE will need to be expanded to cover the entire area within the current airport boundaries, as well as any areas outside the airport boundaries where ground disturbing activities might occur as a result of airport abandonment (for example, removing airport signals). The entire area needs to be included because, but for the new airport, the old one would not be abandoned, and, since future development of the site may not fall under 106 review

procedures, the locations of historic properties need to be known and protected as part if the transition process. The 106 review schedule (see comment above) and the comprehensive archaeological Research Design both need to be very specific about how and when this issue will be addressed.

E. E. This issue will be discussed with you.

C. The comprehensive archaeological Research Design needs to include the development of a map of the area which clearly indicates: areas which have been disturbed to the point that no archaeological investigation is necessary, areas which have been surveyed for archaeological resources (include reference to survey dates and reports), locations of archaeological properties which have been identified but not evaluated, locations of evaluated/listed archaeological properties, and areas with potential to contain archaeological resources that still need to be surveyed (with indications of appropriate methods). The Research Design should also include a method for periodically updating this map as survey work and evaluation proceeds.

F. F. A map of the area will include these locations.

D. The 106 review schedule should indicate the specific point in the project development process when the 106 Memorandum of Agreement is to be complete. If, due to current airport operations constraints or other factors, all of the archaeological survey and evaluation cannot be completed before the memorandum, the memorandum will need to include a specific stipulation for surveying the areas as the project is implemented. The comprehensive archaeological Research Design should serve as a basis for this stipulation.

G. G. This will be specified in the 106 review schedule.

E. We agree that additional Phase I testing, and possible Phase II testing, are necessary for the archaeological site by Duck Lake (Area A).

F. We agree that additional Phase II testing is necessary for the archaeological site east of Taylor Avenue (Area C), which is located within the Fort Snelling Historic District. This testing should include an evaluation of the individual National Register eligibility of the Native American components of the site (outside the period of significance for the district), as well as an evaluation of whether the late 19th/early 20th century components of the site contribute to the Fort Snelling Historic District.

H. H. The testing will include these evaluations.

G. We agree that no further testing is necessary for the find spot in Area B.

If you have any questions regarding our comments, please contact our Review and Compliance Section at 612-296-5462. We look forward to continuing to work with you on the consideration of historic properties as project planning proceeds.

Sincerely,

Dennis A. Gimmestad
Government Programs and Compliance Officer

DAG:dmb

cc: Glen Orcutt, FAA
Larry Dallam, HNTB
Charlene Roise, HR
Christina Harrison, ARS

METROPOLITAN COUNCIL
Mears Park Centre, 230 East Fifth Street, St. Paul, MN 55101-1634 612 291-6359 FAX 612 291-6550 TTY 612 291-0904

March 2, 1994

Nigel Finney
Deputy Executive Director
Planning and Environment
Metropolitan Airports Commission
6040 28th Avenue South
Minneapolis, Minnesota 55450-2799

RE: Alternative Environmental Document Scoping
Minneapolis-St. Paul International Airport
Long-Term Comprehensive Plan Study
Dual Track Airport Planning Process

Dear Nigel:

Council staff has conducted a review of this environmental scoping document to determine its adequacy and accuracy in addressing regional concerns. The staff review has concluded that the scoping document is complete.

Staff does, however, note certain concerns with portions of the document. The first main area of concern relates to water. This concern encompasses wastewater flow projections, projections of glycol to be used on the site and resulting glycol runoff, the impact of stormwater on the Minnesota River, pollutant loadings, retention pond design standards, wetland impacts, ground water appropriations, and the need to maintain a system of monitoring wells sufficient to ensure adequate protection to the groundwater system. I have attached a copy of staff comments generated by our Water Management Unit to further describe these concerns.

Also, the impacts of the alternative scenarios needs to be measured against forecast year populations and households, not just current year development. **A.**

This will conclude the Council's review of the environmental scoping document and draft decision document. No formal action will be taken by the Council. If you have any questions or need further information, please contact Mark Filipi, Council staff at 291-6339.

Sincerely,

Nacho Diaz, Manager
Transportation Technical Services

ND/nmf

A. See Response E. for City of Minneapolis.

METROPOLITAN COUNCIL
Mears Park Centre, 230 East Fifth Street, St. Paul, Minnesota 55101
612 291-6359 TDD 612 291-0904

DATE: February 21, 1994

TO: Mark Filipi

FROM: Judy Sventek, Water Management Unit

SUBJECT: Minneapolis-Saint Paul International Airport Long-Term Comprehensive Plan Scoping Environmental Assessment Worksheet and Draft Decision Document

Sewers

The impact of airport expansion at the Minneapolis-Saint Paul International Airport (MSP) on metropolitan sewers could be substantial, and all aspects of that impact must be addressed in the AED. Several metropolitan interceptors serve the airport and could be affected by the expansion plan. These include 1-MN-346 that flows north into 1-MN-340 and serves Minneapolis, 1-RF-492 and 1-RF-493 that also serve southeast Richfield and 3-BN-497 that serves Bloomington to the south. The flows from all the interceptors flow north into 1-MN-346 and 1-MN-340, and eventually into St. Paul and the Metro wastewater treatment plant.

The AED should provide estimates for the projected wastewater flow at MSP, describe the method used to arrive at these projections, and analyze the ability of individual sewer interceptors and the Metro plant to accept the volume and composition of the wastes. The AED should evaluate whether adequate interceptor capacity is available to serve the projected airport activity, and how any capacity shortfall would be addressed. Flow forecasts (million gallons per day) by five year increments to 2020 should be developed for each interceptor that is affected, including a map of existing and proposed interceptor connections.

The AED must acknowledge existence of the deicing agents ethylene glycol and propylene glycol in storm water flows. The AED should include a projection of the amount of glycol to be applied at the site, give a description of the glycol storage facilities which includes their location, include the application methods and locations, and collection methods for the glycol that runs off aircraft surfaces at MSP. The AED should also address the method for treating glycol contaminated runoff. The MWCC has agreed to treat a small amount of the glycol recovered product for the winter seasons of 1993-1994 and 1994-1995. After that, no commitment for treating glycol within the metropolitan disposal system has been made. Therefore, all alternatives need to consider this action. The AED should provide an estimate of the fraction of glycol runoff that will be treated at a wastewater treatment plant offsite, and the ability of that plant to accept the volume and composition of glycol wastes. If the glycol runoff is to be treated on-site, the volume of that runoff should be estimated and treatment methods should be described. Collection and recycling of glycol should be evaluated as a potential treatment method.

Storm Water and Surface Water Quality

Storm water drains into four drainage basins on the airport: the Snelling Lake Drainage Area, the Minnesota River North and South Drainage Areas, and the Mother Lake Drainage Area. Three of the 4 drainage basins discharge storm water to the Minnesota River. Storm water from the Minnesota River North and South basins discharge into retention basins, which in turn discharge to the Minnesota River. Storm water from the Snelling Lake basin also discharges to a retention basin in the river valley which redirects the runoff to a second basin. The second basin allows for greater detention time and then discharges to the Minnesota River. At times the basin may overflow or be diverted to Snelling Lake - a recreational waterbody located in Fort Snelling State Park. Storm water from the Mother Lake drainage basin drains to a settling basin before it is discharged to Mother Lake. The discharges from all four basins are covered by National Pollutant Discharge Elimination System (NPDES) permits which are reviewed by the MPCA.

The MPCA and U.S. Environmental Protection Agency (EPA) have established a goal to reduce nonpoint pollution loads from urban and agricultural runoff in the Minnesota River by 40 percent by July 1, 1996. The Metropolitan Council has been encouraging watershed management organizations and communities to begin planning how to achieve this goal by controlling nonpoint source pollution.

Under Minnesota Statutes, a comprehensive watershed plan is to be prepared for each watershed in the Metropolitan Area, including the protection of surface water quality. Since most of the airport is not located within the boundaries of any watershed management organization, MAC is responsible for preparing the watershed plan. No plan has been prepared to date.

New runways, taxiways, aprons, roadways and rooftops will significantly increase the impervious surface and reduce the wetland storage area at MSP. This will increase the volume of storm water runoff and nonpoint source pollution loadings such as sediment, nutrients, and metals. Increases in suspended solids (from erosion), urea for runway deicing and its degradation products (ammonia and nitrate), airplane deicers, mercury, phenol, pesticides, and phosphorus from airport activities will also occur.

The AED needs to address the potential impact of storm water runoff on the quality of the Minnesota River. The AED should specify the storm water system to be used at MSP. The AED should evaluate the existing and future pollutant loadings, describe the proposed storm water treatment systems, describe the systems design and evaluate its efficiency in removing or reducing potential pollutants, and determine the effect the system will have on the 40 percent reduction goal. Retention pond designs should meet National Urban Runoff Program (NURP) or similar guidelines that address the reduction of solids and other pollutants in runoff. The AED should incorporate MPCAs best management practices (BMPs) for urban areas for the control of erosion and other sources of nonpoint source pollution.

Wetlands

The airport expansion would result in the alteration of DNR-protected wetlands in the northwest corner of the site (Mother Lake and Duck Lake). The Metropolitan Council *Water Resources Development Guide/Policy Plan, Part 3* states that "the Council will preserve all protected and unprotected natural watercourses, including associated wetlands,... to enhance water quality and to preserve their ecological functions." If there are no alternatives to filling, mitigation should occur within the same secondary subwatershed to compensate for the loss of storm water storage and treatment and wildlife habitat.

Any anticipated actions affecting wetlands should follow the BWSR rules for implementing the Wetland Conservation Act. The AED should present a wetland plan that focuses on avoiding wetland impacts and specifies wetland mitigation measures to be used if impacts cannot be avoided or reduced.

The AED should include maps indicating where all the wetlands and DNR-protected wetlands are at MSP. The AED should also include the acreage affected, wetland types, locations of wetlands, level of sensitivity, mitigation measures used, replacement ratios, and avoidance measures used.

Wetlands that would be left intact remain susceptible to degradation by construction or operational activities that increase storm water runoff or increase pollutant loadings in that runoff. The AED should address plans for MSP, including pretreatment options, to protect the value and function of remaining wetlands from degradation by increased or altered storm water runoff.

Ground Water Quality

The use of fuel, runway and aircraft deicers, and pesticides will increase as a result of the airport expansion. The AED should discuss the use and volume of potential contaminants at MSP, evaluate the risk of ground water contamination, and describe plans to minimize the risk of contamination.

The MSP airport site currently appropriates ground water from several production wells on-site for non-contact cooling water. The use of ground water for non-contact cooling water is to be phased out by the year 2010. If the construction requires an increase in the amount of water needed for non-contact cooling, an AED should be completed to evaluate the need and availability of additional ground water appropriations and the impact of any additional appropriations on the quantity of ground water available to the surrounding communities.

Findings

1. The AED should provide estimates for the projected wastewater flow at MSP, describe the method used to arrive at these projections, analyze the ability of individual sewer interceptors and the Metro plant to accept the volume and composition of the wastes and describe how any capacity shortfall would be addressed.

B. B. Total wastewater flows and composition for the overall MSP facility are not expected to vary between the LTCP alternatives. Impacts of total facility discharge to the Metro plant will be addressed in the EIS.

2. The AED should include a projection of the amount of glycol to be applied at the site, give a description of the glycol storage facilities which includes their location, include the application methods and locations, and collection methods for glycol that runs off aircraft surfaces, and address the method for treating glycol contaminated runoff.

C. C. This will be addressed only if there are significant differences between LTCP alternatives. The treatment, discharge and mitigation measures will be addressed in the EIS for the selected alternative.

3. The AED should provide an estimate of the fraction of glycol runoff that will be treated at a wastewater treatment plant off-site or at an on-site facility and the ability of the plant or site to accept the volume and composition of glycol wastes.

D. D. See Response C.

4. The AED needs to address the potential impact of storm water on the Minnesota River by specifying the storm water system to be used at MSP.

E. E. The AED will address the differential impacts upon the Minnesota River to the extent practical among the various LTCP alternatives. However, stormwater discharge water quality is governed by the facility NPDES permit which includes discharge limitations established by the MPCA.

5. The AED should evaluate the existing and future pollutant loadings, describe the proposed storm water treatment systems, describe the systems design and evaluate its efficiency in removing or reducing potential pollutants, and determine the effect the system will have on the 40 percent reduction goal.

F. F. The AED will evaluate existing pollutant loading and address future pollutant loading projections. To the extent future pollutant loadings are different for each LTCP alternative, these differential loadings will be estimated. Potential stormwater treatment systems and other control methodologies will be discussed. All stormwater discharges are regulated by a NPDES permit. Regardless of the LTCP alternative selected, the stormwater treatment system will be designed to meet the requirements established in the permit.

6. The AED should use NURP or similar standards in retention pond design and incorporate MPCAs BMPs for urban areas for erosion control and control of other sources of nonpoint source pollution.

G. G. This will be addressed in the EIS.

7. The AED should present a wetland plan that focuses on avoiding wetland impacts and specifies wetland mitigation measures to be used if impacts cannot be avoided.

8. The AED should include maps indicating where all the wetlands are, acreage affected, wetland types, level of sensitivity, mitigation measures used, replacement ratios, and avoidance measures used.

H. H. These will be addressed to the extent necessary to select the best LTCP alternative. Detailed analysis will be performed in the EIS for the selected alternative.

9. The AED should address plans for MSP, including pretreatment options, to protect the value and function of remaining wetlands from degradation by increased or altered storm water runoff.

I. I. See Response H.

10. The AED should discuss the use and volume of potential contaminants at MSP, evaluate the risk of ground water contamination, and describe plans to minimize the risk of contamination.

J. J. See Response H.

11. The AED should evaluate the need and availability of additional ground water appropriations and the impact of any additional appropriations on the quantity of ground water available to the surrounding communities.

K. K. See Response H.

city of
bloomington, minnesota
Municipal Building • 2215 West Old Shakopee Road • Bloomington, Minnesota 55431-3096 • (612)881-5911 FAX(612)948-8210

DEPUTY EXEC DIR

Neil W. Peterson
Mayor

Mark E. Bernhardson
Manager

February 23, 1994

Nigel D. Finney
Metropolitan Airports Commission
6040 28th Avenue South
Minneapolis, MN 55450

Re: Comment letter on MAC Comprehensive Plan Scoping EAW

Dear Mr. Finney:

This letter comments on the accuracy and completeness of the information contained in the Scoping Environmental Assessment Worksheet (EAW) and Draft Scoping Decision Document of the Metropolitan Airports Commission (MAC) MSP Long Term Comprehensive Plan and recommends additional issues for investigation in the Alternative Environmental Document (AED).

The issue of operating a new north-south runway only for southerly operations needs to be examined. The substantial investment of funds to build a new runway with a one-way restriction appears questionable. The AED should present more information on this one-way use topic. The alternatives analysis should include use of the north-south runway to its fullest capacity.

A. A. The 1991 LTCP addressed the operational needs that would be satisfied by the north-south runway in conjunction with use of the parallel runways. Use of the runway to and from the south will allow independence with operations on the parallel runways. Operations to or from the north end of the runway would cross the parallel runway flight paths, and would in most cases reduce airport capacity below what it is today. The LTCP update will identify the periods of time when the runway would be used to and from the north, possibly in conjunction with Runway 22 in a strong southwesterly wind condition (0.5% of the year).

Construction of a new terminal on the west side of the airport impacts existing hospitality businesses along I-494 because of changed access to the terminal. This matter needs to be addressed in the AED.

B. B. These impacts will be addressed.

For Alternatives 2, 4 and 6, the EAW states that "The regional highway system would require two additional lanes for TH 77, from TH 62 to I-494. Information on proposed highway design is necessary to evaluate impacts on other highways, access points and existing land uses along affected highways.

C. C. This information will be provided.

The Runway Protection Zone and the State Safety Zones A and B for the new north-south runway will have significant economic, land use and development implications for new and existing uses in the Airport South District. This should be addressed in the AED. Also, the majority of the developed portion of the Airport South District falls within the Ldn 65 or Ldn 70 Noise Contours. The noise impact on existing and future development needs to be further addressed in the AED.

D. D. Noise impacts on existing and future development will be addressed.

Adding several hundred acres of impervious surface at MSP will add significantly to the surface water runoff from the airport. Because this additional runoff eventually enters the Minnesota River, stormwater treatment and mitigation of water contaminants caused by airport activities needs to be thoroughly examined in the AED.

E. E. The differential impacts due to stormwater runoff of the LTCP alternatives will be determined.

With regard to solid waste, the EAW states that "MAC and its tenants currently have source-separation/recycling programs which focus on offices wastes. "Bloomington has found that a significant amount of solid waste is generated by food operations such as restaurants in terminals and waste from aircrafts at flight termination. Additional separation/recycling to include solid wastes generated from non-office uses should be explored in the AED.

F. F. The amount of solid waste generated, recycled and disposed of is the same for each LTCP alternative and will therefore not be addressed in the AED.

For detailed comments on environmental issues, including dust emissions, vibration and errata, please see the attached memo from John Nelson.

Thank you for this opportunity to comment on the scoping document. For further information regarding this letter, please contact Larry Lee, Director of Community Development, at 887-9635.

Sincerely,

Neil Peterson
Mayor

/c

Attachment

cc: John Himle, MAC Commissioner

INTEROFFICE CORRESPONDENCE

To: Janet Jeremiah, Planner

From: John Nelson, Senior Environmental Health Specialist

Re: MSP Long Term Comp Plan, EAW

Date: February 14, 1994

Introduction

The following comments address the adequacy of the scoping document prepared by the MAC as it reviews its long term comprehensive plan.

One-way Runway Use

According to the scoping document a new north-south runway, as presented in Alternatives 5 and 6, will be used exclusively in a southern direction. More study is needed to determine if the runway can be used for northern operations as well.

Surface Water Runoff

Due to the significant increase in impervious surfaces resulting from the proposed improvements in hangers, runways, structures, parking lots and terminals, a complete storm water treatment plan should be prepared for the AED. The contamination of storm water with deicing liquids is an issue which needs further investigation and mitigation.

Dust Emissions

Several Bloomington businesses in close proximity to the airport manufacture electronic devices which are fabricated in "clean rooms". The air in these rooms is filtered in order to ensure high quality, defect free products. Any increase in exterior dust levels associated with construction jeopardizes the quality of their products. Consequently, the AED should address the issue of construction and grading dust control.

G. G. This mitigation measure is the same for each LTCP alternative and will be addressed in the EIS.

Vibration

The electronics industries near the airport use fabrication equipment which is very sensitive to vibration. When vibration occurs, expensive lots of electronic devices are made defective. MAC should meet with representatives of the electronics industry (Cypress, VTC and Ceredian) to investigate the vibration problems associated with overflights and techniques to mitigate vibration.

H. H. We are not aware of any complaints that the MAC has received regarding significant vibration problems from electronics firms around MSP. Many airports operate compatibly with the electronics facilities nearby (particularly San Jose and the Silicon Valley). We would assume that the electronic firms surrounding MSP located there with the full knowledge that an airport was nearby.

Smoke Emissions

The AED should explore alternatives to the burning of waste fuel for the airport's fire training. These fires exceed the smoke capacity standards of the MPCA. A better method should be found to accomplish the important training objectives and at the same time minimize air pollution.

I. I. This mitigation measure is the same for each LTCP alternative and will be addressed in the EIS.

Errata

There appears to be a mistake in the description of Alternative 2 on page 4. Alternative 2 refers to a replacement passenger terminal on the east side of the airport instead of the west side of the airport.

Page 4 says that terminal size will increase from 80,184 square feet to 318,656 square feet. The 80,184 square feet appears to be a typo - the existing terminal appears larger.

J. J. This has been corrected. See Appendix B.

city of eagan

February 28, 1994

NIGEL FINNEY
METROPOLITAN AIRPORTS COMMISSION
6040-28TH AVENUE SOUTH
MINNEAPOLIS, MN 55450

RE: SCOPING EAW - MSP LONG-TERM COMPREHENSIVE PLAN

Dear Nigel:

At its February meeting, the Eagan Airport Relations Committee reviewed the above referenced EAW and related activity forecasts and identified two areas where it would request additional information and analysis in the Alternative Environmental Document for this portion of the Dual Track Airport Planning Process.

First, the Committee requests that primary flight tracks used as assumptions in the contours be included in the environmental analysis together with the contours themselves. This will permit a review of all overflight areas, including those beyond the 65 and 60 DNL contours.

A.

Second, the Committee requests that the impact of alternatives identified in the MSP Capacity Enhancement Plan be included in the AED review. The potential for technological innovation to affect the airport capacity under each of the alternatives can skew the perceived or actual impacts under study. The Committee feels strongly that the addition of traffic numbers that consider improvements being anticipated will be valuable in defining the actual long term impacts of the alternatives.

B.

The City Council has been informed of the Committee's requests in this regard. Because the scoping process is merely requesting feedback on the adequacy of the proposed study and not policy positions of the local government, the Council took no official action in this regard.

Thank you for the opportunity to share these comments.

Sincerely,

Jon Hohenstein
Assistant to the City Administrator

A. The primary flight tracks will be included in the environmental analysis.

B. Work on the LTCP Update and on the AED will make use of the analysis of alternatives that FAA completed as part of the FAA Capacity Enhancement Plan for MSP. The airfield analysis completed by the MAC for the original LTCP included most of the taxiway and technological improvements identified by FAA as "givens", to maximize airport capacity prior to consideration of new runways.

Minneapolis City Planning Staff Report

AIRPORT LONG-TERM COMPREHENSIVE PLAN
Submitted by the Metropolitan Airports Commission

DATE: February 15, 1994

PROJECT NAME: Airport Long-Term Comprehensive Plan, Scoping Environmental Assessment Worksheet, January 1994

PROJECT DESCRIPTION: The Metropolitan Airport Commission is considering an amendment to its comprehensive plan that includes alternatives to build a new north south runway along Cedar Avenue and/or new parallel runways to existing runways 11 and 29. Two of the alternatives also call for the relocation of the main terminal to the north (Minneapolis) side of the airport with access from 28th Avenue in Minneapolis and 66th St. in Richfield.

FUTURE RELATED ACTIONS: This plan is part of the Dual Track process which is considering and studying two future airport sites - one in Dakota county and the other the expansion of the existing airport.

ACTION REQUESTED OF THE CITY: The MAC has requested that the City comment on the plan amendment scoping document by March 2, 1994.

COMMENTS AND FINDINGS:

The Scoping EAW attempts to describe the impact on:

Fish, Wildlife, and Ecologically Sensitive Resources
Water Resources
Water Use
Water -related Land Use Management Districts
Water Surface Use
Soils
Erosion and Sedimentation
Water Quality
Goundwater
Solid Wastes
Traffic
Air Emissions
Dust, Odor, and Noise
Historical and Architectural Resources
Prime or Unique Farmlands
Designated Parks, Recreation Areas, or Trails
Scenic Views and Vistas
Other Unique Resources
Visual Impacts
Compatibility with Plans
Infrastructure and Public Services
Related Developments; Cumulative Impacts
Other Potential Environmental Impacts

Staff offers the following comments related to various sections of the EAW.

Item 13. Water Use

The EAW declares that Minneapolis supplies potable and fire protection water to the airport. It is expected that use will rise 50% by 2020. However, it also declares that the impact on the Minneapolis water system is not known.

The impact should be studied and defined.

A. A. Impacts on the Minneapolis water system are essentially the same for each LTCP alternative. These impacts will be evaluated in the EIS.

Item 15. Water Surface Use

The EAW asks, "Will the project change the number or type of watercraft on any water body? The response in the EAW is that the alternatives will not impact the number or type of watercraft on any water body.

The EAW fails to take note of the substantial number of water users and sail boats used in the City of Lakes. A substantial increase in the number of flights over the city of Minneapolis lakes, including Lake Calhoun, Lake Harriet, and Lake Nokomis will adversely affect the environment and the pleasure of sailing on those lakes. No doubt, some users will be deterred from using these natural resources by increased frequency of noisy aircraft. This is not the BWCA where airplanes are banned but the reasoning is the same. The aircraft operations detract from the recreational experience.

A study of noise impacts on the Chain of Lakes and Lake Nokomis should be studied.

B. B. The AED will present noise level information at hundreds of noise sensitive receptors located around MSP. Recreational use waterbodies are considered noise sensitive areas and analysis of noise impacts will be conducted for these receptors as required.

Item 19. Water Quality - Wastewaters

The wastewater predictions are based on number of enplanements. However, the number of enplanements is not stated for each of the years.

C. C. The projected enplanements are as follows:

1992	--	10.7 million
2000	--	12.7 million
2005	--	13.9 million
2010	--	15.0 million
2015	--	15.9 million
2020	--	16.7 million

Item 23. Vehicle-related air emissions

An estimate of the effect of the project's traffic generation on air quality is supposed to be done. The EAW states that, "The effects of future traffic flows on air quality at both on and off airport receptor sites are not known.

There is a need for a study that does modeling for future traffic flows and how and where the traffic will access the site. The air quality impacts should be estimated for the various alternatives.

D. D. A detailed traffic and air quality analysis will be performed in the AED for the LTCP alternatives.

Item 25. Dust, Odor, and Noise

The EAW asks, "Will the project generate dust, odors, or noise during construction and/or operation?

The EAW response is "yes" with a one paragraph description of the impacts. This is an insult to anyone and any community affected by aircraft noise. The text of that paragraph downplays the noise problem associated with an expanded airport by saying that "a majority of the operations will be by new technology, quieter jet aircraft meeting FAR Part 36 Stage 3 noise levels." The problem with that explanation is that the airlines, especially Northwest, are in such dire financial condition that they can not afford to purchase the new Stage 3 aircraft. In 1993, there was actually a move backward from quieter aircraft. The fleet moved from 60% to 61.8% Stage 2 aircraft. In addition, even if a "majority" of the flights are eventually Stage 3 aircraft, that is only a move from 61.8% Stage 2 to something less than 50% Stage 2. If noise is intolerable at 61.8 %, it will still be intolerable at 49% Stage 2. In the mean time, the number of operations will increase by 73,000 per year (16%) between 1993 and 2020.

Table 6 on page 30 is also a problem. It states how many people are within the Year 2000 DNL 65 and 60 contours. The use of the year 2000 tends to downplay the effect of noise on the residential areas. The table should project how many people will be under those same contours in 2010 and 2020. The year 2020 is the target date for most other projections. The study should include the assumptions about the percent of the operations will by Stage 2 and Stage 3 aircraft in each scenario.

E. E. The selection of the future year DNL contour will be addressed in the AED.

One of the major environmental problems with airports is that they literally stink. The smell from jet exhaust is nauseous to most people. And, unfortunately, the smell is not confined to the airport grounds. It moves with the wind and can be detected several miles from the airport when the wind and number of operations is conducive to spreading the smell. A study of the current condition and the condition in the years 2000, 2010, and 2020 should be done. The EAW should address this problem and describe how far away and how many people are affected by the existing and proposed increased activity at MSP.

F. F. Air quality analysis addressing all criteria emissions will be conducted as part of the AED. Since odors are not defined criteria of air quality and no parameters for their evaluation exist, they will not be the subject of specific analysis. To the extent possible, characterization of relative differences in criteria emissions that may produce odors would be discussed in the AED.

Finally, there should be fugitive dust emission study to determine the impact of dust emissions during construction.

G. G. The evaluation of dust emissions from airport improvements and related construction will be addressed in the scoping process for the EIS.

Item 26. Parks, Recreation, and Trails

The EAW asks if there are any parks, recreation, areas, or trails on or in proximity to the site. It declares that there are parks in Minneapolis that will be affected by noise.

It also says that these will be examined in greater detail in the AED (Alternative Environmental Document).

The AED should specifically address the effect of noise on Minneapolis parks that are under the flight paths. This study should be related to the one requested under Item 15. What is the effect of noise on the users of the Chain of Lakes (Lake Calhoun and Lake Harriet) Regional Park and the Minnehaha Parkway hikers and bikers? How does aircraft noise disrupt the golfing experience at Hiawatha? The noise is actually worse than at Rich Acres because the planes are directly over head.

H. H. See Response B.

Item 30. Related Development; Cumulative Impacts

The EAW acknowledges that there will be impacts on Bloomington, Richfield, and Minneapolis. What about other impacted cities such as Eagan, St. Paul, St. Louis Park, and those farther out that will have more overflights?

With respect to Minneapolis, the report identifies a "Primary Impact Area" generally bounded by 35W, 46th St., Hiawatha Av., and the Crosstown. This area contains almost 12,000 single homes and 36,000 people. It suggests that one alternative to deal with cumulative noise impacts is that this area might be redeveloped into commercial or industrial uses. It then makes the biggest understatement in the whole report when it is mentioned that the massive redevelopment would pose a "significant implementation challenge to the community."

Significant challenge is right! The cost alone for such a buyout would be in excess of $2 billion just for the single family homes if purchase, relocation, and demolition cost $200,000 per house. This may seem like a high cost per house, but Minneapolis's experience in condemnation and relocation is that costs do get exceedingly high. The AED should study and document the cost of this solution.

The cost of a new airport is believed to be close to the cost of buying the Minneapolis homes in the Primary Impact Area. Even if all those houses were purchased, there would still be more people adversely affected by noise in Minneapolis than there would be around the new airport site in Dakota county.

The buyout is not really feasible. Life will just be made more miserable for those 36,000 people in the Primary Impact Area. Unfortunately there are many thousands more that will be adversely impacted by an expanded airport.

Other Issues

The EAW does not mention two very important items: Public Safety and Economic Impact.

Minneapolis, Richfield and Bloomington are all fairly densely populated in the last two miles of the flight path into MSP. The increase of activity in the air space over Minneapolis is likely to stress the control systems. There should be an estimate that compare the number of homes and people affected by a plane crash in the residential area near the airport.

I. I. Minnesota State Safety Zones A and B and the FAA runway protection zone are the most likely areas for a plane crash off of the airport. Population within the safety zones will be estimated.

The economic impact of the airport expansion should also be covered. Will there be a positive or negative effect on property values in Minneapolis as a result of the expansion? Will Minneapolis's business benefit from an expanded airport? What would be the difference in economic development impact on Minneapolis between an expanded airport and a new airport?

J. J. The economic impact on the City of Minneapolis will be limited to identifying and measuring the magnitude of differences of impact between the MSP LTCP alternatives, including direct and indirect (secondary) economic impacts to the extent known. Immediate losses of taxable properties due to airport expansion, for example, will be addressed. The effects of a possible MSP expansion on City of Minneapolis property values and economic viability (compared to a new airport) will be considered in relationship to the Greater Twin Cities Metropolitan Area in the EIS.

Finally, the question must be asked concerning how long these particular improvements will serve air traffic needs in the state of Minnesota. Will we have a serviceable airport until 2020, 2030, 2050 or when? By contrast, how long is the new airport site expected to accommodate air traffic?

K. K. The comprehensive plans being developed for both MSP and the New Airport will contain an analysis of aircraft operational capacities and costs of future delays at each airport through the planning horizon of year 2020 as legislated. Options for expansion of the alternatives to meet demand beyond the year 2020 will also be considered.

RECOMMENDATION:

The Planning Department recommends that the City Council send to the Metropolitan Airport Commission the comments above.

City of Mendota Heights

March 1, 1994

Ms. Jenn Unruh
Metropolitan Airports Commission
6040 - 28th Avenue South
Minneapolis, MN 55450

RE: Environmental Assessment Worksheet (EAW) and
Scoping Decision Document (SDD)

Dear Members of the Commission:

Consistent with your request for comments, the City of Mendota Heights submits this written response.

The level of detail available to determine what alternatives, impacts, issues, and mitigation measures will be addressed in the "Alternative Environmental Document" ignores the use of the ANOMS Data. The Commission has an investment of over a million dollars in the ANOMS system, and it represents the most factual and pertinent noise data in respect to the Minneapolis/St. Paul International Airport (MSP).

A. See General Response 6.

Your December, 1993, ANOMS report shows that the latest published noise contour for the Eagan/Mendota Heights corridor continues to be misleading and not representative of the air noise pollution created by MSP.

B. A separate response will be prepared, since the referenced report is not a part of this study.

The month of December, 1993, may not be typical of the major use and flight patterns for the Eagan/Mendota Heights corridor. However, the ANOMS Data for December, 1993, shows that Monitor No. 15 at William Court and Theresa Street in Mendota Heights registered 40 flights over 90 dB, and 613 flights over 80 dB, and 3,349 flights over 65 dB. The William Court and Theresa Street location is approximately a half mile north of Interstate 494 and is well outside of the MAC designated noise contour for the corridor.

C. See General Response 6.

Therefore, the City of Mendota Heights raises the question: How can noise mitigation methods be analyzed if the "blueprint" for the analysis is flawed from the outset. To take the position that the Commission is mandated by the Federal Aviation Administration (FAA) to use the latest FAA version of the Integrated Noise Model (INM) to conduct the noise analysis including contour analysis is deceiving when more accurate information exists.

We are aware that there may be individual differences among the public's reaction to aircraft noise. However, the issue is not aircraft noise, but noise pollution. Further, the effect of aircraft noise and stress-related health disorders is no longer a matter of speculation. We submit that the time has come where a closed mind on the subject of air noise pollution must give way to an open and frank discussion based on objective, rather than subjective, criteria. The opinion that "some people must suffer for the benefit of the majority" is wrong when addressing matters of pollution.

The Commission's SDD addresses a myriad of environments, however it fails to mention or discuss existing standards for airports. We all know that MSP's land area is deficient in respect to the necessary standards. Independent of the fact that MSP is only 3,000 acres, the SDD makes no mention of the constraints imposed by this land area. This raises the question: Can 530,000 annual operations be safely "shoe horned" into the existing facility.

D. Each LTCP alternative has been developed according to FAA design standards as specified in the FAA Advisory Circular, *150/5300-13, Airport Design*. The Advisory Circular defines the planning standards of airfield geometry to ensure FAA operation and safety standards are satisfied. A detailed airport layout plan will be developed for the recommended concept and submitted to the FAA for review and approval.

The EAW discusses the various development alternatives for MSP, yet chooses to summarily reject several options which are worthy of further analysis. More specifically, the south parallel runway option has been dropped from consideration without benefit of a full environmental review. Similarly, the concept of a new runway parallel to the existing 4/22 runway is not brought forth for further study. This despite the fact that the existing 4/22 runway is scheduled for extension within the next few years. If a complete environmental analysis of the various MSP development options is truly desired, the City of Mendota Heights believes it would be appropriate that the EAW include an evaluation of both the south parallel and the 4/22 parallel runway options.

Sincerely,

CITY OF MENDOTA HEIGHTS

Charles E. Mertensotto
Mayor

CEM:kkb

cc: Governor Arne Carlson; Senator James P. Metzen; Senator Deanna Wiener; Representative Thomas Pugh; Representative Tim Commers; Dakota County Board of Commissioners; City of Eagan; City of Burnsville; City of Bloomington; City of Richfield; City of Minneapolis; City of St. Paul; City of Inver Grove Heights; City of Sunfish Lake

E.

E. A new runway parallel to Runway 4-22 was one of the initial alternatives identified for evaluation as described in *Volume 5, Airport Development Concepts, December 1991*, of the Long-Term Comprehensive Plan. This alternative was not carried forward for further study because it did not meet the operational requirements for additional airfield capacity.

CITY OF RICHFIELD

6700 Portland Avenue • Richfield, Minnesota 55423-2599

City Manager James D. Prosser | Mayor Martin Kirsch | Council Don Priebe, Susan Rosenberg, Michael Sandahl, Russ Susag

March 2, 1994

Mr. Nigel D. Finney, Deputy Executive Director
Planning and Environment
Metropolitan Airports Commission
6040-28th Avenue South
Minneapolis, MN 55450

Subject: Comments on the MSP Long Term Comprehensive Plan (LTCP) Draft Scoping Decision Document (DSDD)

Dear Mr. Finney:

The City of Richfield appreciates the opportunity to review and comment on the DSDD, and looks forward to responses to our concerns and questions as the Alternative Environmental Document (AED) is prepared over the coming months. The City wants the process and the results to completely and fairly represent all of the alternatives that are available, and to adequately describe the basis for the recommended plan. How it is done, who is heard, when it is done and why it will happen is just as important as what is in the Plan.

The City comments are organized under each of the headings in the SDD as follows:

I. INTRODUCTION

A. PURPOSE OF THE DOCUMENT

1. Because the revised traffic and utilization forecasts are substantially different from the original and the interim scenarios, the purpose of the process cannot be limited to a choice among the seven alternative plans previously prepared. Each of those plans must be reviewed, reconsidered, and perhaps revised, and new concepts should be constructed and evaluated.

A. A. The purpose of this study is to plan for development of MSP to meet future air travel demands. Differences in the revised forecast from previous forecasts concerning activity levels or fleet mix do not significantly change the airfield requirements from prior analysis. The alternatives will be updated where differences in the forecast do change airport requirements.

2. The LTCP is proposed to meet the air transport needs "for the year 2020 and beyond." The Plan must also address the needs from the date of adoption up to 2020. This 25 year "interim" period is at least as important as the 2020+ period, and could actually prove to be critical to maintaining the long term viability of air transportation. Many of the external factors and decisions made by others that will determine the long term role and function of air transportation as MSP, will be made before the year 2000. This "interim" period deserves and requires a specific planning effort as well.

B. B. Each LTCP alternative will contain a phasing plan that describes how the development of the airport would progress through the year 2020.

3. Compliance with FAA Order 5050.4A does not "ensure" that the project will meet the procedural and substantive environmental requirements. The only guarantee, or assurance that the requirements have been met is a complete, thorough, fair and objective definition, analysis, and determination of the most appropriate LTCP scenario.

4. MAC is the designated RGU for preparation of the Plan documentation (usually the role of the "Proposer"). MAC is also the documentation reviewing agency and the Plan approval agency. In this case, MAC is prosecutor (makes and presents the Plan), judge (rules on procedures and adequacy of the Plan), and jury (makes the final decision to adopt and implement the Plan). That puts all of the affected, related and concerned parties at a distinct disadvantage, and imposes an extraordinary burden on MAC to be thorough, inclusive, fair and objective. The process must encourage and promote ideas, questions, concerns and actual involvement by all of the active "outsiders," and include substantive response to every issue, or the Plan will reflect the serious, even fatal flaws resulting from incestuous propagation.

C. C. See General Response 2.

B. PROPOSED PROJECT

1. The project should be development of an LTCP that will provide capacity and facilities to meet several future scenarios. Nobody can know the future, but a future scenario must be defined and used as a basis for the Plan. The forecasts, the assumptions, and the "wishes" that go into constructing that scenario need to be identified and properly labeled.

D. D. The recommended development concept should be the alternative that provides the facilities to meet future airport demands with flexibility and operational efficiency. The revised activity forecasts were completed with the input of several expert panels addressing forecast methodologies, aviation assumptions, and socioeconomics. The technical appendix to the revised forecast discusses the methodology and assumptions in detail.

2. The project must also produce an LTCP that imposes the least hardships on affected people, businesses, users, and provides the most benefits to those interests as well.

3. For this reason, the project area should be identified and delineated as Figure 1A. All of the affected and potentially affected areas (noise, dislocation, economic impact, etc.) should be shown on a Figure 1A, just as the total "search area" was defined and published for the new airport track of the dual track process.

E. E. This will be done in the AED.

4. The Revised Activity Forecasts that accurately reflect control tower and pilot practices, must be clearly presented and used as the basis for evaluating alternatives.

F. F. Assumptions regarding future aircraft operations will be described in the AED.

C. SCHEDULE FOR THE MSP LTCP

1. The Comment Period should be extended. It is not reasonable to expect affected interests to be able to effectively influence a document that presents a multitude of complex considerations and potential impacts that has been prepared over a period of years, in a few days time. Opportunities for effective interaction with the Plan team should be provided during both the preparation and extended review periods.

2. Some reasonable time should be set out in the schedule for consultant and staff preparation of revisions, additions, deletions or explanations for not changing the document in response to the comments received. The schedule shows 15 calendar days between the end of comment to EQB review, and only 4 calendar days between EQB review and adoption of the SDD by MAC. No serious or substantive response is possible within that time frame.

3. Again after the document itself is completed, only 17 calendar days are set out between the end of comments and the EQB review, and only 4 calendar days between EQB review and adoption by MAC. By not allowing time and providing for the effort, the appearance is given that MAC has already decided that additions, revisions, deletions or modifications to the LTCP, or even simple rejection of requests or comments will not be required or permitted.

G. The comment period for the Draft AED's was extended to 60 days. The comment period for Scoping is 30 days. The legislated time frame does not permit further extension; however, comments will be considered at any time.

H. Since MAC staff and its consultant are closely coordinating the study with EQB and member agency staffs, the schedule anticipates no major issues at the EQB review. If such occur, the schedule will be revised.

II. EVALUATION OF ALTERNATIVES

A. ALTERNATIVES CONSIDERED

1. In light of substantially revised forecasts and related operational information, other alternatives should be considered. The operating policies and procedures of the FAA in the control tower will have more direct impact on the utilization off the facility than the choice of one alternative over another.

   - Will the operational alternatives be fully explored and consistently applied to all of the plans?
   - Will the most effective option be used as the basis for selection of the preferred plan alternative?
   - Will at least one alternative without the 4-22 runway extension be evaluated?

I. To the extent possible, the same aircraft operation assumptions will be used for each alternative evaluated in the AED. These operational assumptions will incorporate comments by the appropriate government agencies.

J. This document describes the methodology for selection of the recommended development concept. The recommended concept should provide facilities to meet aviation demands with operational efficiency and flexibility.

K. See General Response 5.

C. ALTERNATIVES TO BE STUDIED IN AED

1. Possible new alternative(s) should be added, and at least one alternative without the runway 4-22 extension should be studied.

III. SUMMARY OF ISSUES AND CONCERNS

1. The pilot and control tower practices, preferences and procedures must also be reviewed and utilized in the evaluation process.

2. OK.

3. Noise mitigation berms were not removed in the Rich Acres Golf Course. Ground noise impacts to residents along Cedar Avenue are particularly important because of proximity and duration of noise due to the nearly parallel positioning. Evaluation should include simulation testing of current operations along existing runways, and research into similar situations at other US airport experiences.

4. Air quality impacts should also be considered.

5. Study should include opportunities for alternative fuels, particularly renewable bio fuels.

6. Not only compatibility, but support and enhancement of land uses in adjacent communities.

7. And opportunities.

8. Relocation should include noise mitigation projects.

9. LTCP should support and assist local comprehensive plans.

10. OK.

11. Must consider part inhabitants (other than endangered) and users as well as land.

12. OK.

13. Must include mitigation potential.

14. OK.

15. OK.

16. OK.

17. OK.

18. OK.

19. OK.

L. The berms would be removed by LTCP Alternatives 5 and 6. Ground noise impacts to residents will be addressed.

M. Air quality impacts associated with the MSP LTCP alternatives will be addressed for on-airport sources (stationary sources, aircraft operations, motor vehicles, training fires, fuel storage and the like) and for off-airport roadways which are differentially affected by the LTCP alternatives.

N. The mitigation of potentially adverse environmental impacts including fuel consumption by source and type will be addressed in the EIS.

O. This has been added to 6. as an issue. The analysis will address land use compatibility.

P. The AED will address significant impacts to park and recreation area features and users, as well as land impacts.

Q. Mitigation measures for differential impacts will be addressed.

20. OK.

21. OK.

22. Should also include cost of local infrastructure replacement required. **R.**

R. Significant cost differences between LTCP alternatives will be addressed.

IV. ANALYSIS OF ISSUES AND IMPACTS

A. INTRODUCTION

1. While the study will "document differences," some consideration must be given to the relative weight of the various factors used to measure differences. The City would like to be involved in the weighting process. **S.**

S. Formal "weighting" of the impacts is not anticipated.

B. ISSUES AND IMPACTS REQUIRING DETAILED ANALYSIS

1. Forecasts. Constructing the future scenario is the most critical step in the evaluation process because it forms the measuring stick for every factor. The substantial differences between the forecasts used as a basis for development and comparison of alternatives and the current ideas (like the Capacity Enhancement Plan) suggests that the basic alternatives need to be reviewed and perhaps revised before the comparison and selection process begins. The possibility of high speed rail and tele-conferencing need serious consideration as well. **T.**

T. Descriptions of the implications of these technologies are located in the *Minneapolis-St. Paul International Airport, Revised Activity Forecasts,* December 1993. Differences in the revised forecast from previous forecasts concerning activity levels or fleet mix do not significantly change the airfield requirements from prior analysis. The alternatives will be updated where differences in the forecast do change airport requirements.

2. Noise is a key issue to most of the active, affected people and institutions. The City is quite concerned with the ground noise impacts to residents along Cedar Avenue from the proposed north-south runway. Simulation testing and similar situations on other airports should be included in the study. Mitigation must also be considered for each alternative. **U.**

U. Noise impacts will be analyzed for each alternative using the metrics described in the Scoping Decision Document. Noise mitigation measures as appropriate will be incorporated in the recommended development concept.

3. Energy studies should include potential for alternative fuels, particularly renewable bio fuels for stationary energy consumption. The LTCP should recognize the critical nature of energy sources and costs in the future and promote alternative energy wherever possible. **V.**

V. See response N.

4. Land use and comprehensive plans should be evaluated primarily on the basis of information and documentation submitted by local governments. **W**

W. This information will be evaluated.

5. Social and economic impacts on communities are difficult to quantify, but the study must do more than simply "identify" and "present" if it is to be credible at all. Where quantification is not possible, comparison may be. **X.**

X. Social and economic impacts that cannot be quantified will be provided with comparisons, where possible.

6. Visual impacts should be identified and analyzed.

7. Section 4(f)6(f) recreational/public lands need to be more than "identified." Alternatives to taking, substitutions when needed, and mitigation of impacts must be weighted and evaluated for each alternative. **Y.**

Y. Section 4(f) and Section 6(f) land avoidance, impact minimization, and mitigation measures will not be detailed in the MSP LTCP AED but will be considered when developing and comparing the LTCP alternatives. These issues will be addressed in detail in the EIS for the selected LTCP alternative.

8. Historical/architectural/archeological resources seem to be well covered even though differences between plan alternatives will be difficult to quantify.

9. Wetland evaluations should also include definitions of future management requirements including chances for success and costs to achieve successful propagation. **Z.**

Z. The analysis of wetland resources potentially affected by the MSP LTCP will include a discussion of wetland functions and values, the appropriate management for on-site wetlands, and mitigation measures for unavoidable impacts. Continuing management costs will not be included in the AED.

10. MVNWLR/Fort Snelling State Park are two very important affected park and open space assets. Costs of human use area mitigation by relocation or introduction of structures, plant materials, or berming should be included for each alternative. Continuing management costs should also be estimated and compared. **AA.**

AA. These issues will be examined in the EIS.

11. Bird/aircraft.

12. Transportation system impacts on local collecter streets from diversion from regional highways is a concern of the City. The choice of a two entrance plan means the potential for double impact on the City. Regional road system improvements must be include in the costs associated with all alternatives. **BB.** **CC.**

BB. Differential impacts on local collector streets in Richfield will be addressed. Differential cost estimates of regional road system improvements will be provided.

13. Air quality data should be more recent that in 1990.

CC. Future air quality background levels (2020) will be based upon air quality monitoring data in the MSP study area. Adjustments will be made to background data from different years to reflect future changes in traffic density as well as vehicular emissions. Thus, the year for which background data were collected will be adjusted to the year 2020 using appropriate factors.

14. Stormwater discharge.

15. Water-related land use issues seems to only apply to the elimination of water ponding areas on the expanded site. Mitigation and future management costs should be included and compared. **DD.**

DD. Water-related land use issues in the context of an EAW means shoreland, flood plain, and wild/scenic river land use districts and related zoning ordinances. Mitigation measures will be addressed to extent necessary to select the best LTCP alternative. The detailed analysis will be performed in the EIS.

16. Soils/geology/hydrogeology. Under the heating/cooling considerations remember substitution of renewable bio fuels. What are the "alternate sources of potable water"? **EE.**

17. Wastewater discharge.

EE. Discussion of heating and cooling in this section refers only to sources of water needed in the heating and cooling processes. Discussions of renewable bio fuels and alternate sources of potable water will be addressed in the EIS.

C. ISSUES AND IMPACTS NOT REQUIRING DETAILED ANALYSIS

1. Wells may be better handled as a group with the MDH.

2. Solid and hazardous wastes will need to be properly handled, stored and picked up by properly licensed contractors, so there will, in fact, be some solid waste facilities on site. Recycling also requires some, though minimal, "facilities" on site, and will most likely grow in importance in the future. **FF.**

FF. We agree.

V. PUBLIC AND AGENCY INVOLVEMENT

A. The process outlined will provide "input" and give a few representatives a chan ce to have infrequent input in the process, but it will not provide for participation or involvement by the affected individuals and groups. The "Dual Track" process is so complex that it is not likely that even the primary involved professionals will be able to keep the purposes, objectives, factors, weights, alternatives and basic choices separate and distinct at the decision point, but it is clear that the decision makers at MAC and the affected local governments will not. They will have to rely on their own staff and consultant advisors, and more likely, gut reactions. The views of a more representative cross section of the involved, affected community would give all of them a better basis for evaluating the real as well as perceived impact of their decisions. Committees and task groups will not do it. At least two forums involving representatives from all of the interested groups and entities, organized and structured on an interactive model, with some assignment or defined responsibility would be require to provide for useful, believable participation. The time frame and structure outlined in the SDD does not permit or provide for participation so the decision makers will not have that kind of broad, informed, considered judgement from their constituents. **GG**

GG. The process is similar to most controversial EIS studies. Opportunity for public input is provided through the advisory committees, task force, Draft Scoping Decision Document, scoping public meeting, informational meetings, Draft AED, public hearing, and Commission meetings.

Sincerely,

James D. Prosser
City Manager

JDP:ds
Copy: Federal Aviation Administration
Minnesota Department of Transportation
Metropolitan Council
Mayor Martin J. Kirsch
Richfield City Council
Representative Edwina Garcia
Representative Mark Mahon
Senator Phil Riveness
Senator Jane Ranum

SIERRA CLUB

North Star Chapter

February 23, 1994

Jenn Unruh
Metropolitan Airports Commission
6040 28th Avenue South
Minneapolis, MN 55450
(612) 726-8100

Metropolitan Airports Commission (MAC):

Thank you for the opportunity to comment on the Metropolitan Airports Commission's *Minneapolis-Saint Paul Airport (MSP) Long-Term Comprehensive Plan (LTCP) Scoping Environmental Assessment Worksheet and the Draft Scoping Decision Document.* The Sierra Club would like to take advantage of this comment period to express concern about two aspects of this document.

One

On page 5 of the Draft Scoping Decision Document, we see a "Summary of Issues and Concerns" which lists comments received on the First Phase Scoping Report and input during the MSP LTCP scoping process. Issue number two is the "Potential aircraft overflight noise impacts, including stress-related health disorders". I assume this relates to page 7 where under the heading "IV. Analysis of Issues and Impacts" and the subheading "Noise" we see that the effect of aircraft noise on stress-related health disorders will be addressed.

I believe the issue of stress-related health disorders is an important issue requiring detailed analysis but I cannot find a comparable analysis of this issue in the Metropolitan Airports Commission's *Dual Track Airport Planning Process New Airport Site Selection Study Draft Alternative Environmental Document* (AED). This AED presents the possibility of removing whole towns from Dakota County, introducing aircraft noise into a rural setting, eliminating family farms, and completely changing the economic basis of a community by building a multi-billion project in a rural setting. These actions will obviously introduce tremendous stress into the Dakota county community with the accompanying stress-related disorders.

A.

A. See page 18 for discussion of stress-related health disorders.

Two

Going back to the "Summary of Issues and Concerns" on page five, we see issue number seven is the "Social and economic community impacts". I assume this relates to page 10 where under the heading "Social and Economic Community Impacts" and the subheading "Community Disruption; Induced Socioeconomic Impacts" we see that community identity fracturing will be addressed.

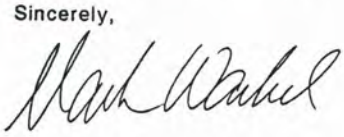
I believe this issue of community identity fracturing is an important issue requiring detailed analysis but again I cannot find a comparable analysis of this issue the AED described above. What can fracture a community more that placing a major airport into a rural setting?

B.

B. The issue of community fracturing due to a new airport will be addressed in the EIS.

The Sierra Club is extremely concerned that while MAC is sensitive to the negative MSP impacts on South Minneapolis it prefers to ignore the fact that people *do* live in Dakota County and they will be inheriting these same negative MSP impacts should a new airport be built there.

Sincerely,



Mark Warhol
Airport Issues

APPENDIX B

REVISIONS TO SCOPING ENVIRONMENTAL ASSESSMENT WORKSHEET

Appendix B contains revisions to pages 4, 5, 12, 13 and 33 of the Scoping EAW.

Page 4, Alternative 2 - The second line should read "a replacement terminal building on the west side of the airport;"

Page 4, Item 7. The second sentence should read "The MSP terminal building areas will increase in total area from 1,464,000 gross sq.ft. to 2,787,000 gross sq.ft. by 2020, ... etc."

Page 5, The FAA approvals should read "airspace approval, airport layout plan approval, EIS approval and Record of Decision"

Page 12, Item 6. Put an "X" in the Yes box and delete the "X" in the No box. Last line, add the following "The Minnesota DNR's National Heritage Database contains a record for a Colonial Waterbird Nesting Site at Mother Lake. Forster's Terns and Black Terns have been periodically observed nesting at the lake since 1945. Forster's Terns, a state Special Concern species, last nested at Mother Lake in 1986, a year during which the water level rose 16 centimeters in one week. Fluctuating water levels from run-off likely played a role in the terns' inability to successfully fledge young at Mother Lake during the last few years they nested at the site, and may have contributed to subsequent site abandonment.

Page 13, First Paragraph, sixth line. Delete remainder of first paragraph after "weather." and insert the following:

"One eagle breeding territory which has received consistent use is located on Long Meadow Lake. The breeding territory consists of three known nest sites. The three nests are within one mile of each other. The first nest is located at Long Meadow Lake. This nest was occupied by adult eagles in 1986 and 1987, but nesting did not occur during those years. The eagles actively nested at this site from 1988 to 1991; two young eagles were produced by the pair in 1989 at this nest. In 1992, the eagles nested at Gun Club Lake, approximately one mile northeast of the Long Meadow Lake nest. Two young produced that year were killed when the nest blew down in a wind storm in June of 1992. In 1993, the eagles nested and successfully fledged one young on the Minnesota River, about halfway between the two previously-used nests.

A second undocumented breeding territory is thought to exist in the Louisville Swamp Unit of the MVNWR; however, should this territory exist, it is too distant from MSP to potentially incur adverse impacts. No traditional winter night roosts are known to exist within the Refuge, the nearest one being at the Pigs Eye Lake Scientific and Natural Area in St. Paul. However, it is now known where eagles feeding at Black Dog and Long Meadow Lakes during the winter months go to roost at night. On January 9, 1994, ten eagles were observed in the Minnesota River Valley east of Interstate 35W during the annual Mid-Winter Bald Eagle survey conducted by Department Natural Heritage and Nongame Research staff. This is the highest number of eagles seen in this part of the valley in the past five years. It is not known that these birds travel from Black Dog/Long Meadow Lake to the known winter roost site at Pig's Eye. It is possible that a night roost exists in the Minnesota River Valley, closer to the Black Dog/Meadow Lake area where these eagles are feeding.

Page 33, Item b. prime or unique farmlands ? change to "No".