

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)
RECORD OF DECISION (ROD)
FOR
WORLD GATEWAY PROGRAM
AND OTHER CAPITAL IMPROVEMENT PROJECTS**

**AT
CHICAGO O'HARE INTERNATIONAL AIRPORT
CHICAGO, ILLINOIS**

Date: June 2002



**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
GREAT LAKES REGION
CHICAGO, ILLINOIS**

TABLE OF CONTENTS

<u>Chapter No.</u>	<u>Page No.</u>
1. Federal Agency's Decisions	1
2. Background	8
3. Agency Actions	23
4. Purpose and Need	26
5. Alternatives Analysis	30
6. Environmental Consequences and Mitigation	33
7. Public and Agency Involvement	53
8. Key Environmental/Planning Considerations	55
9. Other Environmental/Planning Considerations	65
10. Federal Agency Findings	92
11. FAA Approval and Order	102
Right of Appeal	104
List of Abbreviations and Acronyms	105
Glossary of Terms	107

Appendices

A. Regulatory Agencies' Reviews	A-1
B. Communities'/Organizations' Reviews	B-1

LIST OF TABLES

<u>Table No.</u>		<u>Page No.</u>
R-1	World Gateway Program and IUP Summary	2
R-2	Projects Included in the “No Action” Alternative and the “Proposed Projects” Alternatives	34
R-3	Existing and Forecast Emissions	42
R-4	Proposed Mitigation/Commitments.....	50

LIST OF EXHIBITS

<u>Exhibit No.</u>		
R-1A	Airport Layout Plan (Sheet 1 of 2)	4
R-1B	Airport Layout Plan (Sheet 2 of 2)	5
R-2	Major Components of the World Gateway Program	12
R-3A	World Gateway Program Enabling Projects (Sheet 1 of 2)	14
R-3B	World Gateway Program Enabling Projects (Sheet 2 of 2)	15
R-4	Independent Utility Projects	17

1. FEDERAL AGENCY'S DECISIONS

This Record of Decision (ROD) provides final agency determinations and approvals for those Federal actions by the Federal Aviation Administration (FAA). These actions are necessary to respond to decreasing efficiency and passenger convenience in O'Hare International Airport's terminal area, or needed to implement the proposed terminal projects and would not otherwise be undertaken at this time. They also are needed to improve services for Airport users, promote efficient use of Airport real estate, and generate revenue. The proposed development includes the World Gateway Program and other capital improvements at Chicago O'Hare International Airport (O'Hare or Airport). The World Gateway Program includes the development of two new passenger terminals, the redevelopment of an existing terminal, expansion of another existing terminal, and the relocation of several existing facilities. These relocations are known as Enabling Projects, because they would only be needed in the near term if the World Gateway Program was built. In addition, several other projects are considered that are planned for the same time which are independent of the World Gateway Program and would be built regardless of the terminal development. These are referred to as Independent Utility Projects, which were included for administrative convenience and to facilitate consideration of cumulative impacts. These projects, as identified in **Table R-1**, are referred to collectively as the "Proposed Projects", and are described in more detail in this ROD.

This ROD unconditionally approves the Proposed Projects as depicted on the revised ALP, based on determinations through the aeronautical study process regarding obstructions to navigable airspace. The ROD also provides Federal approval that enables the City of Chicago to establish its eligibility to participate in funding through use of Federal Airport Improvement Program funds or Passenger Facility Charges (PFCs) for eligible projects. Finally, the ROD enables the approval of FAA's release of federally obligated land for certain non-aviation related use.

The Federal actions, including appropriate airspace determinations, and associated airport development are described in detail in the Final Environmental Assessment (Final EA) for the World Gateway Program and other Capital Improvement Projects at O'Hare, dated June 21, 2002. The agency's decisions are based on the information contained in the Final EA and all other applicable documents available to the agency and considered by it, which constitute the administrative record.

The principal features of this ROD include:

- A statement of the agency's decisions;
- An identification of all alternatives considered by the FAA in reaching its decision, with a specification of the alternative or alternatives that are considered to be environmentally preferable; and
- The means adopted (mitigation measures) to avoid or minimize environmental harm from the Proposed Projects.

ENVIRONMENTAL ASSESSMENT PROJECTS

WORLD GATEWAY PROGRAM TERMINAL PROJECTS

1. Terminal 2 Redevelopment & Apron Reconfiguration/Co-location of FIS Facilities
2. Terminal 3/Concourse K Extension & Apron Reconfiguration/Taxiway A/B Reconfiguration
3. Terminal 4 Development & Apron Reconfiguration/Co-location of FIS Facilities
4. Terminal 5 Reconfiguration
5. Terminal 6 Development & Apron Reconfiguration/Taxiway Extension/Terminal 5/6 Access Road/Parking Garage for Terminal 6/Terminal 6 ATS Realignment and Station

WORLD GATEWAY PROGRAM ENABLING PROJECTS

1. Delta Cargo Facility Relocation
2. Lynxs Cargo Facility Relocation
3. Sky Chefs Flight Kitchen Relocation
4. H&R Support Facility Relocations
 - a. ComEd Switchyard D177
 - b. City Substation RB40 Relocation
 - c. Cooling Towers Relocation
 - d. Chicago Transit Authority Substation Relocation
5. Ameritech Switch Relocation
6. ComEd Switchyard D179 Relocation

INDEPENDENT UTILITY PROJECTS

1. Expansion of Elevated Parking Structure (EPS)
2. Lot E Parking Reallocation
3. Consolidated Rental Car Facility/ATS Station
4. Rental Car Storage and Maintenance
5. ATS Storage and Maintenance Facility Relocation/Track Extension
6. Long-Term Parking ATS Station and Intermodal Connection
7. Additional Fuel Tank Farm Development in Northwest Airfield
8. City Warehouse and Trades Building
9. Eastside Collateral Development
10. O'Hare Roadway Improvements
 - a. Lee Street/Northwest Tollway Interchange
 - b. Bessie Coleman Drive Realignment
 - c. Zemke Road Extension
 - d. Mannheim Flyover
 - e. Balmoral Avenue Extension
 - f. Airside Service Road Bridge
 - g. Southeast Service Road and Spine Road Conversion

FONSI / ROD

World Gateway Program

Chicago O'Hare International Airport

City of Chicago

Source: Created by Landrum & Brown, 2001

**World Gateway Program and
IUP Summary**

TABLE R-1

FAA DETERMINATION

The Final EA for the World Gateway Program and other Capital Improvement Projects at O'Hare was accepted by the responsible Federal Official as a Federal document on June 21, 2002. Based on a review of the Final EA, and all applicable information, it is the FAA's final determination that the revised Airport Layout Plan (ALP), dated May 1, 2002 and included herein in a reduced format as **Exhibits R-1A and R-1B**, for proposed improvements (Proposed Projects) to O'Hare is approved. These Proposed Projects are specifically described in Chapters 2, 4, and 5 of this ROD, and were identified in detail in Chapter 2 of the Environmental Assessment (EA). In addition, these Proposed Projects are environmentally approved as being eligible for Federal financial assistance.

These approvals of the ALP and the eligibility for Federal funding constitute final approval. However, the FAA notes that the airport sponsor, the City of Chicago (City), Department of Aviation (DOA), has agreed, in the Final EA, to the various conditions of this approval, in particular, the conditions requiring mitigation measures.

In reaching this determination, consideration has been given to 49 U.S.C. Section 47101 (a)(7), which states that it is the policy of the United States "that airport construction and improvement projects that increase the capacity of facilities to accommodate passenger and cargo traffic be undertaken to the maximum feasible extent so that safety and efficiency increase and delays decrease." Furthermore, the FAA has given careful consideration to: (a) the aviation safety and operational objectives of the Proposed Projects in light of the various aeronautical factors and judgments presented; (b) the needs of O'Hare as part of the national air transportation system and the airport delay reduction needs through the year 2012; and (c) the anticipated environmental impacts of the Proposed Projects.

The FAA has carefully considered all reasonable alternatives to the Proposed Projects. Although the "No-Action alternative" has fewer developmental and environmental impacts (floodplain, wetlands) than the preferred alternative and is the "environmentally preferred alternative," it fails to achieve the purposes and needs for these Proposed Projects. However, the Proposed Projects will provide greater noise relief and improved air quality than the No-Action alternative. Only the Proposed Projects fully achieve the following purposes and needs:

World Gateway Program is needed to respond to decreasing efficiency and passenger convenience in O'Hare's terminal area. The World Gateway Program is intended to meet three general needs:

1. Improve gate availability and efficiency in the terminal area;
2. Improve connecting passenger convenience; and
3. Improve local passenger convenience.

The detailed description and specific purposes of each of the World Gateway Program projects are found in Section 2.2 of the EA.

Finding of No Significant Impact / Record of Decision

World Gateway Program Enabling Projects are called “Enabling Projects” because they are needed to implement the proposed World Gateway Program projects and would not otherwise be undertaken at this time. The purpose of the Enabling Projects is to relocate existing Airport service and support facilities to accommodate the City’s proposed World Gateway Program. The purpose and need for the Enabling Projects are described in much greater detail in Section 2.3.2 of the EA.

Independent Utility Projects are other airport projects that the City has also identified that would improve services for Airport users, promote efficient use of Airport real estate, and generate revenue. These projects have independent utility from the World Gateway Program – that is, the projects would be needed regardless of whether or not the World Gateway Program is implemented. The detailed description and specific purposes of the Independent Utility Projects are found in Section 2.4 of the EA. Although independent of the World Gateway Program, the Airport sponsor is including these projects for administrative convenience and to disclose the cumulative effects of the Proposed Projects.

For the reasons summarized in this ROD and supported by detailed discussion in the EA, the FAA has determined that there is no possible, prudent, feasible, or practicable alternatives to the Proposed Projects, which is the agency’s preferred alternative.

This ROD completes the approving agency’s thorough and careful environmental review and decision-making process and is prepared and issued by the FAA to announce and document certain Federal actions and decisions in compliance with the National Environmental Policy Act of 1969 (NEPA) [42 U.S.C. Section 4321, *et seq.*], the implementing regulations of the Council on Environmental Quality (CEQ) [40 CFR Parts 1500-1508] and FAA directives [Order 1050.1D, including Change 4 and Order 5050.4A]. A ROD is also used by the FAA to demonstrate and document its compliance with the several procedural and substantive requirements of aeronautical, environmental, programmatic, and related statutes and regulations that apply to FAA decisions and actions on proposed projects.

This ROD provides the final Federal determinations and approvals based on environmental analysis and findings in the EA. A discussion of the leading factors considered by the FAA in reaching this decision follows.

- 1) The preparation of this EA fully evaluates potential impacts associated with the Proposed Projects and complies with the requirements of the National Environmental Policy Act and implementing regulations and orders. FAA has made a final determination that there is no need to prepare an Environmental Impact Statement (EIS) based on the Final EA and comments received on the Draft EA. FAA has found no significant impacts or other circumstances associated with the Proposed Projects that would require preparation of an Environmental Impact Statement.
- 2) As a matter of NEPA’s intent and public policy, it is fully reasonable to assess the effects of the Proposed Projects, including the World Gateway

Program, at this time since they have independent utility and would proceed with or without the long-term concept. Otherwise, essentially all focused and necessary infrastructure improvements would have to wait years while long-term conceptual planning for O'Hare, proposed by the Mayor of Chicago, is finalized, even if the improvements would not have any direct or cumulative significant impacts.

- 3) The World Gateway Program is independent of the long-term concept including runways and is not a connected action that requires a single environmental review under NEPA. Further detailed cumulative environmental and other analysis of the long-term concept would be speculative at this time, because planning, approvals, analysis, and other requirements for the concept have not been completed. The runway concepts are not known with sufficient specificity to conduct a detailed analysis at this time. Additionally, the entire concept is subject to numerous and considerable uncertainties. The FAA finds that NEPA policy concerns about segmentation, connected actions or cumulative impacts are not implicated in this EA. Projects are not being reviewed separately to obscure significant impacts and avoid the ultimate need for an EIS. The proposed long-term concept will require the FAA to conduct an EIS that will include a full cumulative review of past, then present and future impacts (the Proposed Projects, including the World Gateway Program). An EIS will be necessary if the long-term concept is to proceed.

2. BACKGROUND

ABOUT THE AIRPORT AND ITS TERMINALS

Chicago O'Hare International Airport (O'Hare), owned and operated by the City of Chicago (City), provides air service to the greater Chicago Metropolitan Area, playing a vital role in the economy of the region and the air transportation system of the nation. The Airport is a major connecting hub for the two largest U.S. airlines, American Airlines and United Airlines, and is an important spoke station for virtually every other major carrier. Approximately 79 airlines operate at O'Hare, including 19 domestic carriers, 32 foreign flag carriers, 6 commuter carriers, and 22 cargo airlines. Service is offered to 136 domestic and 45 international markets throughout Europe, the Far East, the Middle East, Latin America, the Caribbean, and Canada. Refer to Chapter 1 of the EA, Introduction and Background, for more background information about O'Hare.

The passenger terminal complex at O'Hare includes four terminal buildings. Terminals 1, 2, and 3 have 148 gates and 15 remote aircraft parking positions and serve domestic flights and some international departures. Terminal 5, the International Terminal, has 21 gates and 5 remote aircraft parking positions. It serves all international arrivals requiring customs clearance and departures by most of the foreign flag carriers. However, the terminal facilities – many built more than 30 years ago – no longer always serve passengers and airlines as well as originally intended. For example:

- Increases in aircraft wingspan have meant that the right sized gates are not always available for arriving aircraft. The existing terminals were planned for a lower number of larger widebody jets (e.g., Boeing 747s, 767s, or 777s) than are used today and projected for the future. The result is that aircraft often must wait for a gate to become available. In the future, if no terminal improvements are made, some aircraft would need to unload and load passengers at remote locations, and buses would be used to transport passengers to connect to the terminals.
- Arriving international passengers must use Terminal 5 – the only location for immigration and customs processing – and then transfer to completely separate terminals for domestic connecting flights. This increases the time and difficulty of connections. Recent airline alliances have increased the number of passengers making such connections – a trend expected to continue.
- Congestion in hallways, holdrooms, ticketing areas, and other portions of the terminals reduces passenger service and increases the amount of time needed to move through the terminals. As the time and inconvenience associated with heightened security practices have increased, the need to address terminal inefficiencies unrelated to security requirements remains important.

DESCRIPTION OF THE WORLD GATEWAY PROGRAM TERMINAL PROJECTS

The World Gateway Program includes the reconstruction and expansion of existing terminal facilities, the construction of new facilities in the existing terminal area of O'Hare, and related projects required to enable the terminal improvements. The World Gateway Program terminal projects are discussed in this section. See **Exhibit R-2** for a depiction of the World Gateway Program.

Terminal 2 Redevelopment & Apron Reconfiguration/Co-location of Federal Inspection Services (FIS) Facilities: This updated terminal would primarily serve United Airlines and its Star Alliance partners, allowing international arrivals and departures from Terminal 2. This project includes:

- Reconfiguration of the terminal interior to reduce congestion and to provide larger holdrooms, improved concessions, more ticket counters, and improved baggage claim facilities
- Widening the passenger corridor linking Terminals 1 and 2
- Demolition and reconstruction of Concourses E and F to more efficiently accommodate larger aircraft
- Installation of FIS facilities for international arrivals
- Co-location of United Airlines and its Star Alliance partners (including Lufthansa, Air Canada, and others)
- Improved connections between international arrivals and domestic flights
- Reconfiguration of aircraft parking apron

Terminal 3/Concourse K Extension & Apron Reconfiguration/Taxiway A/B Reconfiguration: Extension of Concourse K would add approximately five gates capable of accommodating a wide range of aircraft types. It would primarily serve American Airlines and its partners in the **oneworld** airline alliance. This project includes:

- Extension of Concourse K
- Additional interior space to reduce congestion and provide larger holdrooms and improved concessions.
- More gate frontage for large aircraft
- Relocation of Taxiway A/B to provide for additional apron space
- Construction of new apron to provide additional space for airline operations

Terminal 4 Development & Apron Reconfiguration/Co-location of Federal Inspection Services (FIS) Facilities: A proposed new Terminal 4 would be built north of Terminal 3, on land now occupied by Concourse L and the support facilities for O'Hare's Heating and Refrigeration (H&R) Plant. The proposed terminal would be connected to Terminal 3, allowing the integration of operations at both terminals and accommodating FIS facilities for international arrivals. With the new FIS facilities, all

gates at Terminal 4 would be able to accommodate international arrivals. This project includes:

- Construction of Terminal 4
- Installation of FIS facilities for international arrivals
- Co-location of American Airlines and its **oneworld** alliance partners
- Improved connections between international arrivals and domestic flights
- Enlargement and reconfiguration of the apron area

Terminal 5 Reconfiguration: Terminal 5 would be modified to integrate with the proposed Terminal 6 and to allow flexible use by both domestic and international carriers. The reconfiguration would reduce congestion and provide larger holdrooms and improved concessions.

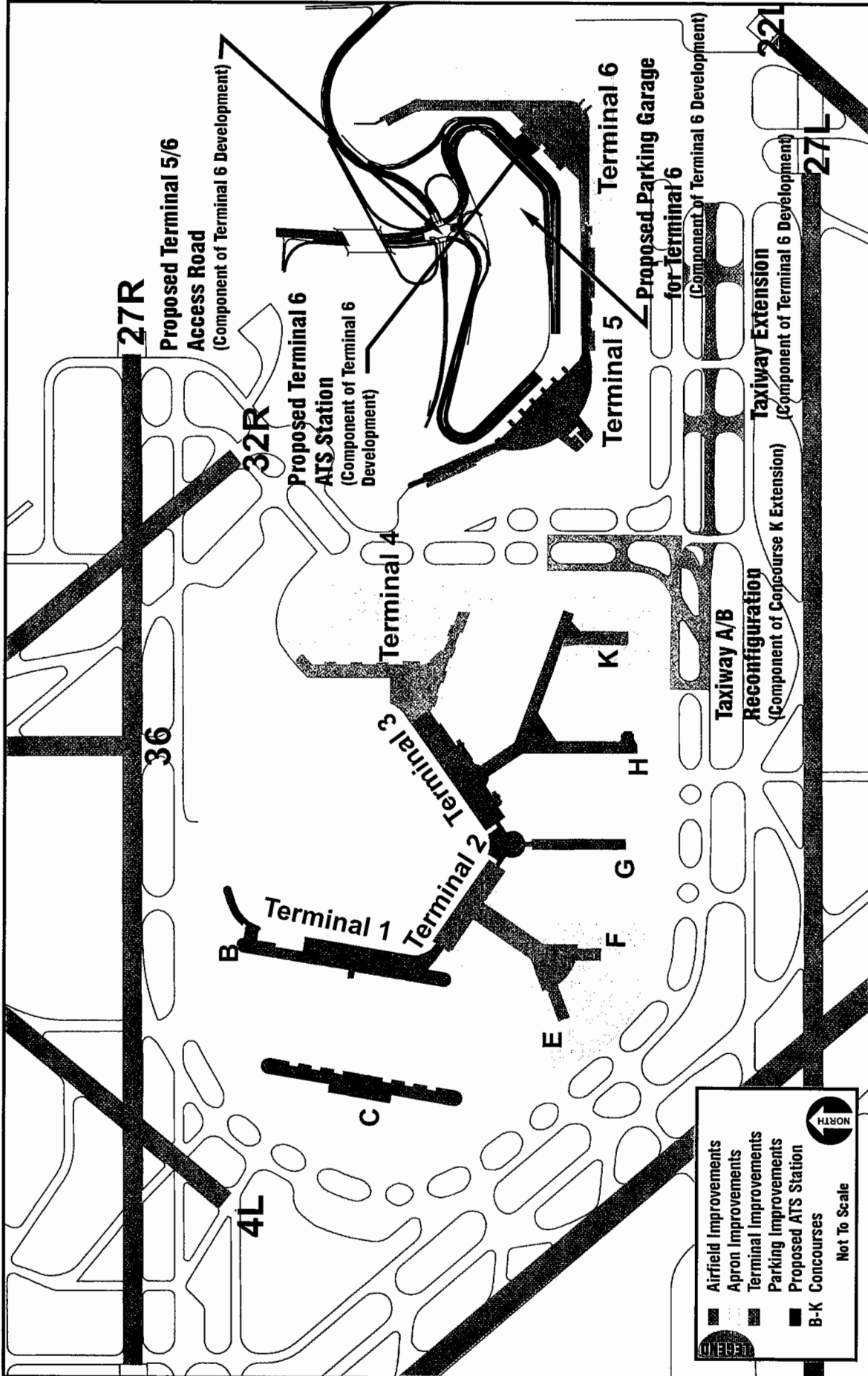
Terminal 6 Development & Apron Reconfiguration/Taxiway Extension/Terminal 5/6 Access Road/Parking Garage for Terminal 6/Terminal 6 ATS Realignment and Station: A new Terminal 6 would be built east of Terminal 5 on a site currently occupied by several airport and airline support facilities. Those facilities would be relocated elsewhere on the Airport. The new terminal would serve the spoke-market (non-hub) domestic carriers at O'Hare, many of which now use Terminal 2 on Concourses E and F and Terminal 3, Concourse L. The new, modern facility for the spoke-market carriers would support the proposed redevelopment of Terminal 2 and the development of Terminal 4. Terminal 6 would connect with Terminal 5, mirroring its crescent shape and having a similar interior configuration. It would feature short passenger walking distances, continuous access to a dual-level roadway system, an Airport Transit System (ATS) station, and an automobile parking garage. The project would include the following:

- Construction of Terminal 6
- Reconfiguration of apron
- Reconfiguration of taxiway
- Development of access road for Terminals 5 and 6
- Construction of Terminal 6 parking garage
- Realignment of ATS line and construction of ATS station in Terminal 6

Summary - World Gateway Program Terminal Projects: When completed, the World Gateway Program Terminal Projects would add approximately 1.5 million square feet of terminal area, for a total of 6.3 million square feet. Gate frontage would increase by 14 percent. The amount of gate frontage capable of serving international arrivals would more than double from 3,970 to 10,851 linear feet. The total number of gates would increase from 169 to 181 – a net increase of 12 gates.

All new aircraft parking positions would have fueling hydrants and connections for supplying aircraft with pre-conditioned air and ground power. This would help to improve outdoor air quality by reducing the need to use aircraft auxiliary power units (APUs) and by reducing the need for fuel trucks to service aircraft. The City also

intends to use principles of sustainable design to reduce energy and resource use for the proposed terminal buildings.



Chicago O'Hare International Airport

City of Chicago

Source: Created by Landrum & Brown, 2001

FONSI / ROD

World Gateway Program

Major Components of the World Gateway Program

R-2



After implementation of the World Gateway Program, the City would control all aircraft parking positions on either a preferential- or common-use basis, rather than through airline-exclusive agreements. This would allow the City to better manage the use of gates, ensuring that they are available to new or existing carriers that will make efficient use of them. Although there would be more gates available with the World Gateway Program it should be noted that there would be the same number of operations with or without the Proposed Projects, including the World Gateway Program. Refer to Section 1.7.5 of the EA for further information on the aviation forecasts.

DESCRIPTION OF WORLD GATEWAY PROGRAM ENABLING PROJECTS

Several facilities must be moved to enable the implementation of the World Gateway Program, and would not otherwise be necessary. These "Enabling Projects" are discussed in this section. See **Exhibits R-3A** and **R-3B** for a depiction of the World Gateway Program Enabling Projects.

Delta Cargo Facility Relocation

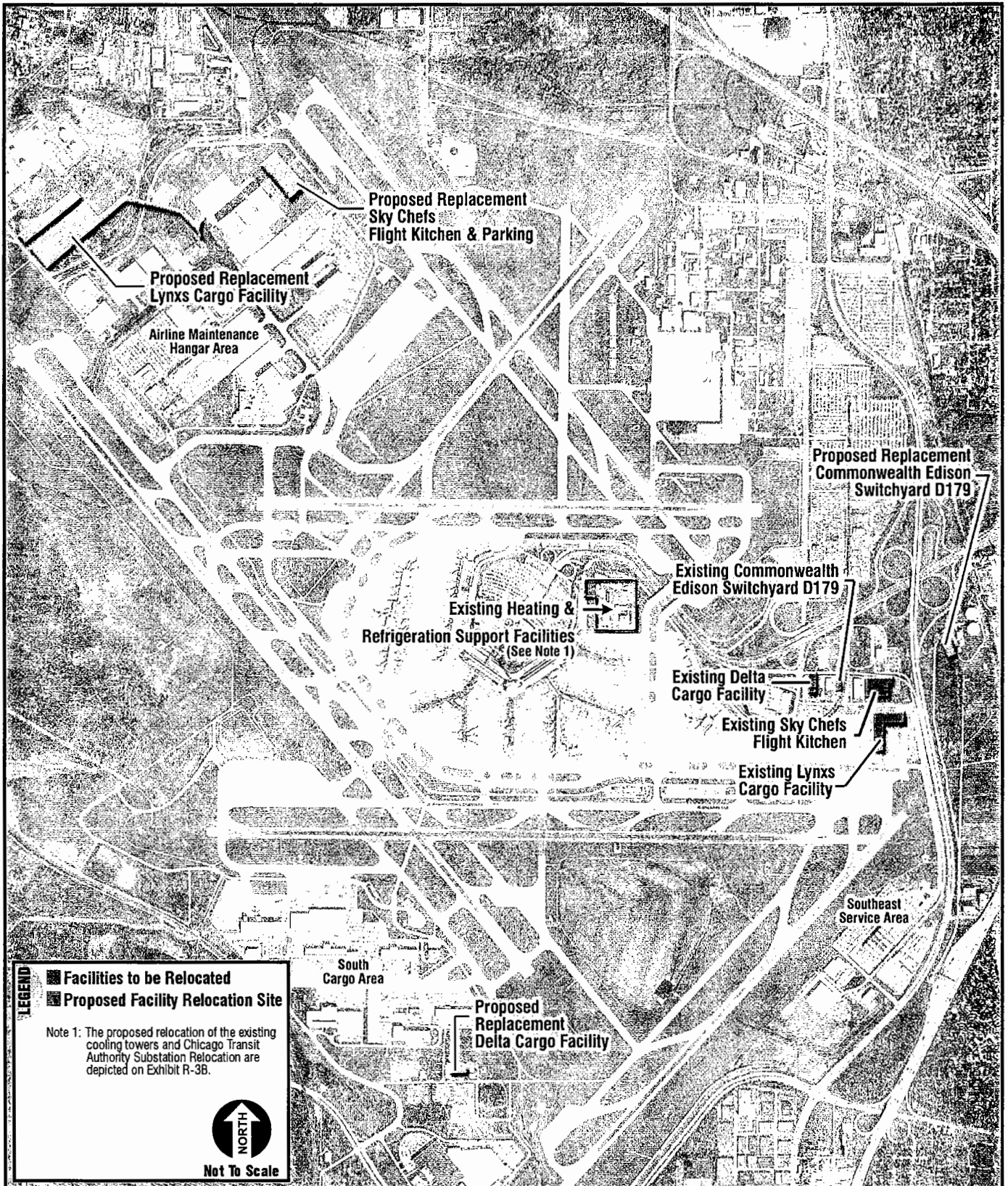
The Delta Cargo facility currently occupies the site of the proposed access roadway system and parking structure for Terminal 6. Cargo carried in passenger aircraft (known as belly cargo) is moved between aircraft and this facility for collection, sorting, and redistribution to trucks or other passenger aircraft. This requires convenient access between the terminal core and the cargo facility. To meet this need, the Delta Cargo facility would be relocated to the South Cargo Area.

Lynxs Cargo Facility Relocation

The Lynxs Cargo Facility in the East Cargo Area occupies land needed for the apron at the proposed Terminal 6. The Lynxs facility houses operations for freight forwarders, all-cargo carriers, and belly cargo for passenger carriers. To meet the needs of these users, Lynxs requires direct access to the runways and convenient access to the passenger aircraft apron. Good access to regional arterial roadways and the interstate highways is also necessary. The proposed new Lynxs facility would be located in the northwest airfield where all these requirements can be met.

Sky Chefs Flight Kitchen Relocation


The Sky Chefs Flight Kitchen (Sky Chefs) is located in the East Cargo Area, across from the Lynxs Cargo facility, on the site of the proposed Terminal 6 apron. This food preparation and distribution facility serves American Airlines, its alliance partners, and other domestic and international carriers. The Sky Chefs facility would be relocated to the Airline Maintenance Hangar Area in the northwest part of the Airport near the northwest end of Runway 14L-32R.



LEGEND

- Facilities to be Relocated
- Proposed Facility Relocation Site

Note 1: The proposed relocation of the existing cooling towers and Chicago Transit Authority Substation Relocation are depicted on Exhibit R-3B.


 NORTH
 Not To Scale

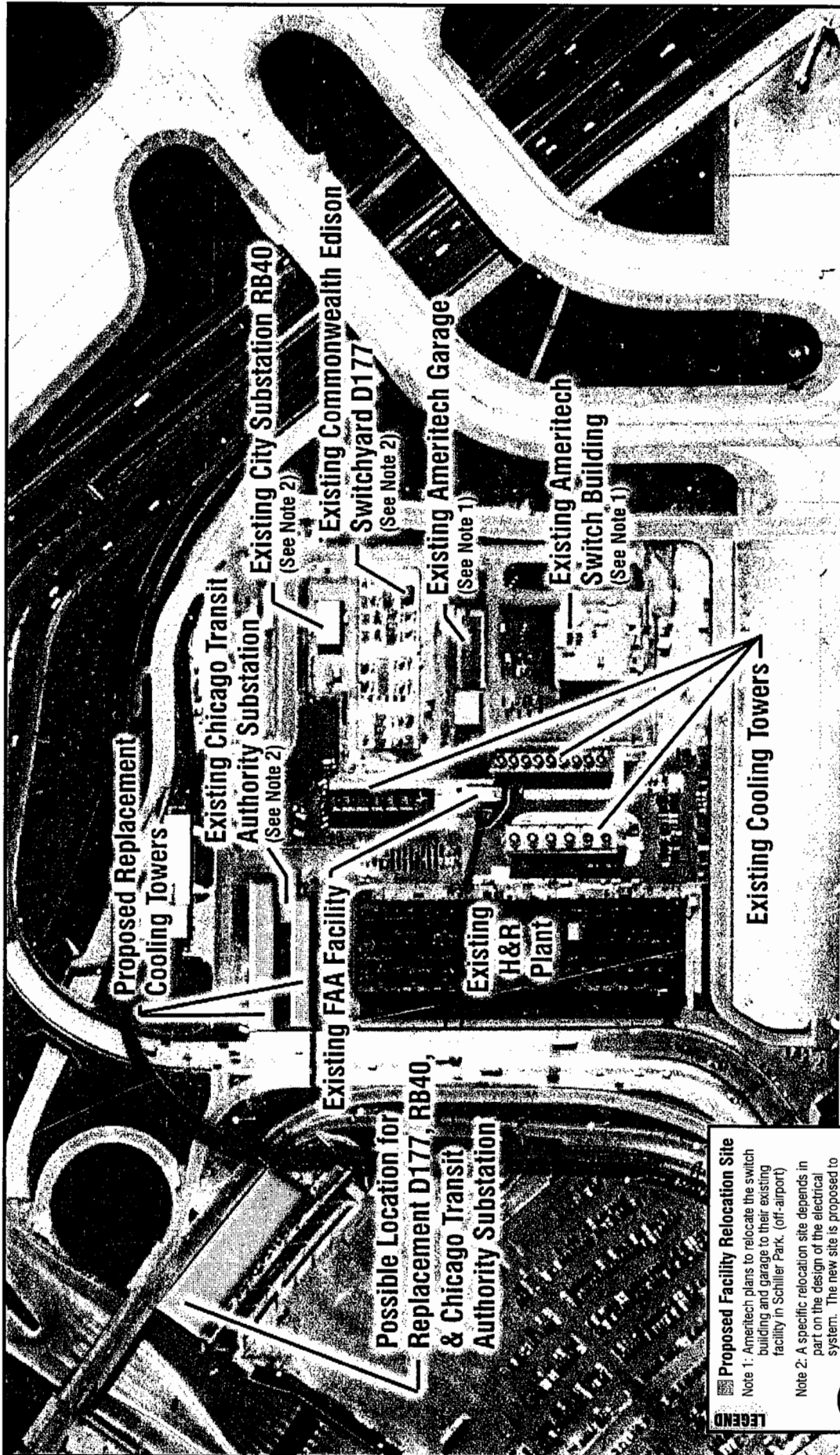
FONSI / ROD

World Gateway Program

Chicago O'Hare International Airport
 City of Chicago
 Source: Created by Landrum & Brown, 2001

Enabling Projects

EXHIBIT R-3A



LEGEND

Proposed Facility Relocation Site
 Note 1: Ameritech plans to relocate the switch building and garage to their existing facility in Schiller Park, (off-airport)
 Note 2: A specific relocation site depends in part on the design of the electrical system. The new site is proposed to be in the terminal core parking area.

Not To Scale

NORTH

Chicago O'Hare International Airport

City of Chicago

Source: Created by Landrum & Brown, 2001

FONSI / ROD

World Gateway Program

Enabling Projects



R-3B

Heating and Refrigeration (H&R) Plant Support Facility Relocations

The central Heating and Refrigeration (H&R) Plant and associated utility facilities, located north of Concourse L, provide heating and cooling for the terminals. Some of the support facilities at the H&R Plant complex are on the site of the future Terminal 4. Those facilities, which must be relocated to make way for the development of the new terminal, include:

- ComEd Switchyard D177 and City Substation RB40
- Cooling Towers
- Chicago Transit Authority (CTA) Substation
- Ameritech Switch Relocation

ComEd Switchyard D179 Relocation

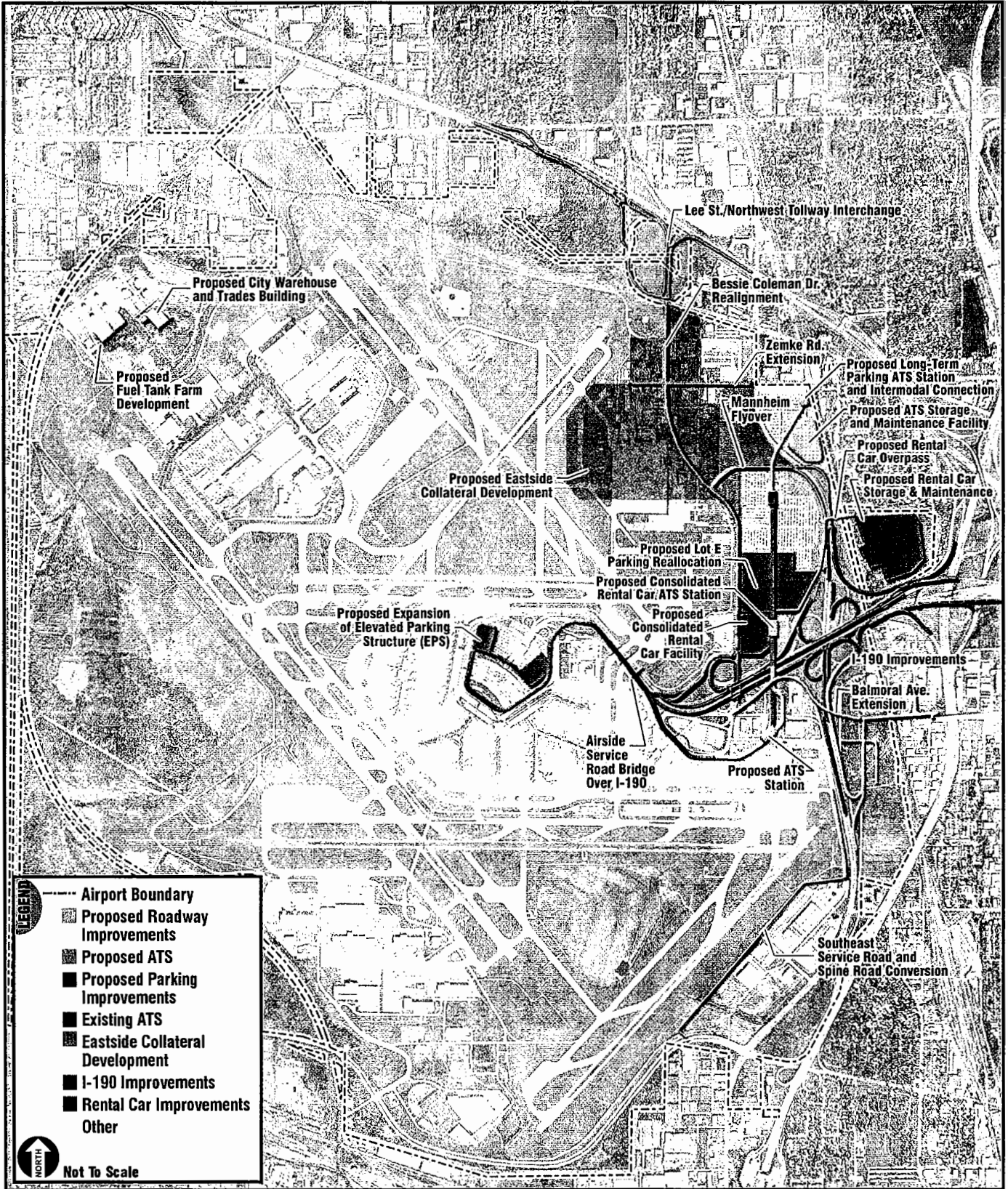
Com Ed Switchyard D179, located just west of the existing ATS track and Department of Aviation Warehouse facility, serves a variety of electrical loads. The switchyard would need to be relocated to accommodate the development of roadways to serve proposed Terminal 6.

DESCRIPTION OF INDEPENDENT UTILITY PROJECTS

In addition to the World Gateway Program, the City has identified other Airport projects that would improve services for Airport users, promote efficient use of Airport real estate, and generate revenue. Those projects are independent of the World Gateway Program and would be needed whether or not the World Gateway Program is implemented. They are referred to as the Independent Utility Projects. They are considered in the EA for administrative convenience and to facilitate consideration of cumulative impacts. These projects are described below and assessed in later chapters of the EA. See **Exhibit R-4** for a depiction of the Independent Utility Projects.

Public Parking Improvements

Prior to the tragic events of September 11, 2001, the public parking lots at O'Hare were often filled to capacity. And while there has been a decline in aviation activity in the immediate aftermath of the tragedy, enplanements and operations have been recovering. Current auto parking capacity at O'Hare is 22,963 spaces with auto parking demand projected to reach 34,500 spaces by 2012, with or without implementation of the World Gateway Program. This is because the forecast indicates that local passenger demand will increase regardless of new terminal construction. Without new parking, traffic congestion is expected to increase as passengers take more time to find parking spaces or are dropped off or picked up by personal vehicles, limousines, or taxicabs. Two independent parking projects are proposed: expansion of the Elevated Parking Structure (EPS) in the terminal core and the reallocation of parking spaces from the existing rental car storage and maintenance area to Lot E.



FONSI / ROD
World Gateway Program

Chicago O'Hare International Airport
 City of Chicago

Source: Created by Landrum & Brown, 2001

Independent Utility Projects

EXHIBIT R-4

Expansion of the Elevated Parking Structure (EPS): The EPS in the terminal core currently has a capacity of 9,207 spaces. Currently, 1,326 of these spaces cannot be used due to security issues. It is not known if, or when these spaces will become available again. Expansion of the EPS to include an additional 6,500 spaces is proposed. Because the expanded structure would encroach into two surface parking lots (Lots B and C), displacing 1,200 surface parking spaces, the net increase would total 5,300 spaces.

Lot E Parking Reallocation: The conversion of space in the existing rental car parking area to long-term public parking for Lot E would provide 3,000 more parking spaces with close access to the Airport Transit Service (ATS) – light rail. This will help to meet the demand for long-term parking spaces with convenient ATS access, a critical need during peak travel periods. This additional space will be provided directly south of the existing Lot E after the rental car facilities are consolidated and a new rental car storage and maintenance facility is developed. A new parking garage in Lot E, providing an additional 5,090 spaces, is also planned. The new parking garage has already been evaluated in a previous environmental assessment for which the FAA issued a Finding of No Significant Impact (FONSI) on May 3, 2000.

Consolidated Rental Car Facility/ATS Station

A consolidated facility for rental car pick-up and drop-off is proposed south of the existing rental car area. An ATS station would serve it. The consolidated facility is intended to provide better service to passengers and to reduce congestion in the terminal core contributed to by shuttle bus services operated by each rental car agency. Completion of this project would reduce the volume of traffic in the terminal core by eliminating the use of individual rental car shuttle buses. Instead of individual buses, a system of shared buses would serve the consolidated rental car facility. ATS access would also be provided to the facility, further reducing congestion in the terminal area by reducing the need for shuttle bus use.

Rental Car Storage and Maintenance Lot

A site for rental car storage and maintenance is proposed east of Mannheim Road, near the consolidated rental car facility. The two properties would be linked by a dedicated non-public road and bridge over Mannheim Road. The purpose of this project is to provide rental car agencies with storage and maintenance space close to the proposed consolidated rental car facility, without conflicting with the needs of other facilities that require more direct access to the ATS.

ATS Storage and Maintenance Facility Relocation/Track Extension

The existing Airport Transit System (ATS) [light rail] storage and maintenance facility, located northeast of Terminal 5, covers approximately 12.5 acres and can accommodate the existing 15-vehicle fleet. Due to increased ridership, the City is acquiring 23 more ATS vehicles over a three-year period. The ATS facility must be

expanded to approximately 18 acres to accommodate the larger fleet of vehicles. Because insufficient space is available adjacent to the existing ATS site, the entire facility must be relocated. Because all property on the current ATS track is already used or needed for long-term parking or rental car facility development, the ATS line must be extended to open up a site for the maintenance facility. The proposed site is on the south side of Economy Parking Lot F, east of Mannheim Road. Extension of the ATS line into Lot F would also facilitate an intermodal connection with the Metra (Metropolitan Commuter Rail Corporation – Chicago's Commuter Rail) line, which currently has a stop at Lot F. While development of this site would remove approximately 1,418 parking spaces, this would be more than offset by the proposed increase in parking spaces in Lot E.

Long-Term Parking ATS Station and Intermodal Connection

A new ATS station is proposed in Economy Parking Lot F at the existing Metra stop in Rosemont. The ATS line would have to be extended a short distance north of the proposed relocated ATS maintenance facility to the Metra Station. This project would enhance the appeal of Lot F to local passengers by improving access to the terminal complex. The connection to the Metra line would also improve the utility of the mass transit system for suburban employees working in the terminal area and for locally originating passengers. These improvements would help to reduce congestion in the terminal core by providing a convenient transportation alternative for people using the Airport.

Additional Fuel Tank Farm Development in Northwest Airfield

Pipelines from various refineries supply the aircraft fuel storage farm in the northwest corner of the Airport. It has the capacity to meet airline fuel demands with an extra margin of reserve, allowing for a continuous supply in case of short-term supply disruptions. While it is expected that future demand could be met with the current delivery and storage capacity, the projected growth in fuel demand would reduce the level of fuel reserves, lowering the level of reliability now offered to the airlines. To maintain sufficient reserves, additional storage capacity would be needed by 2012. Two additional aircraft fuel storage tanks are proposed at the current tank farm site to meet this need.

City Warehouse and Trades Building

The City is proposing construction of a consolidated warehouse and trades building in the northwest part of the Airport on an undeveloped site between the fuel farm and the relocated Lynxs Cargo Facility. These functions are now in two facilities in different parts of the Airport. The existing Airport Maintenance Building in the Southeast Services Area houses the Airport's electricians, carpenters, painters, and other trades people. The existing City Warehouse Facility in the East Cargo Area is used for storage of miscellaneous supplies and spare parts. Currently, these facilities are located in different parts of the Airport. The combined building would enhance

efficiency by reducing the number of trips among the terminals, trades building, and City Warehouse.

Eastside Collateral Development

The proposed Eastside Collateral Development area is in the Northeast Quadrant of the Airport and encompasses the former United States Air Force Reserve and Army Reserve facilities (Military Site) being acquired by the City. The Eastside Collateral Development area has high commercial value and much of it is not expected to be needed for aeronautical uses in the near future. The City intends to develop this area for high value commercial and office development to produce revenue. The City will retain sufficient control over the land to ensure that it is used for airport-compatible purposes. A portion of the Military Site with airside access will be reserved for potential future use for cargo-related activities.

Eighty acres of the Northeast Quadrant have already been allocated for the development of a headquarters campus for United Airlines, 30 acres of which were approved for development by the FAA in a FONSI issued on May 1, 2000. Development of the remaining 50 acres is evaluated in this EA as part of the Eastside Collateral Development.

O'Hare Roadway Improvements

Several road projects, with independent utility from the World Gateway Program, are proposed to improve the Airport's ground transportation system. The proposed road projects to be approved in this document are described below.

Lee Street/Northwest Tollway Interchange: This project would improve regional access to the Northeast Quadrant from the north and west suburbs by providing a new directional interchange between the Airport and the Northwest Tollway (I-90) just east of Lee Street. It would include new ramps to and from the west on I-90. The ramps would be connected to Higgins Road by a new roadway that would extend south from I-90 east of Lee Street. The Illinois State Toll Highway Authority (ISTHA) operates the Northwest Tollway and would be involved in the development of this project.

Bessie Coleman Drive Realignment: Bessie Coleman Drive is the major north-south street serving the Northeast Quadrant. It provides access to the Long-term Parking Lot E, temporary parking Lot G, the rental car facilities, the commercial vehicle holding area, the new United Airlines headquarters campus, and the remainder of the Northeast Quadrant. The southern end of Bessie Coleman Drive terminates at the International Terminal 5. Bessie Coleman Drive can be accessed from I-190 or from Mannheim Road via Zemke Road. The realigned and extended road would connect with Higgins Road and the proposed Lee Street/Northwest Tollway Interchange. Bessie Coleman Drive would then link the north and south sides of the Northeast Quadrant directly with the expressway system.

Finding of No Significant Impact / Record of Decision

Zemke Road Extension: Zemke Road is the only road in the Northeast Quadrant that intersects with Mannheim Road, the primary north-south arterial street in the Airport area. Zemke currently terminates in a cul-de-sac just west of the current alignment of Bessie Coleman Drive. To support redevelopment of the Northeast Quadrant, the City must improve access to the area from Mannheim Road. Therefore, the City proposes to extend Zemke Road to the west to intersect with the realigned Bessie Coleman Drive, providing direct access from Mannheim Road to the collateral development areas.

Mannheim Flyover: This proposed project involves a series of ramps providing free flowing access between I-190 and northbound Mannheim Road and the Northeast Quadrant. The ramps would cross over Mannheim Road and improve traffic flow and decrease congestion by eliminating the need for westbound vehicles to use the I-190/Bessie Coleman interchange, thus avoiding the need to make left turns to the north across Bessie Coleman Drive. It also eliminates the need for westbound vehicles on I-190 to exit on Mannheim and make left turns across Mannheim Road at Zemke Road.

Balmoral Avenue Extension: The Balmoral Avenue extension would cross Mannheim Road on an overpass and connect to Bessie Coleman Drive at the entrance road to Terminal 5. This project would provide additional Airport access directly from the Rosemont hotel and convention facilities east of the Airport, thereby reducing travel distances and relieving some of the burden on I-190. This project would also improve access from the north to Airport property east of Mannheim Road, which is used for a number of aeronautical purposes. The Balmoral Tunnel, proposed by Rosemont, is being evaluated as a separate independent project by the Village of Rosemont.

Airside Service Road Bridge: There is currently no direct airside service road linking the former Military Site/Northeast Airfield and the terminal core. The only way to travel between these areas is to drive around the perimeter of the Airport or to use aircraft taxiways, requiring multiple runway crossings. A dedicated service road will be necessary in the future as the former military site/Northeast Airfield is developed for general aviation and other facilities that require access to the terminal area. An airside service road would reduce the risks associated with mixing aircraft and ground vehicle operations. An airside service road bridge over I-190 is proposed to provide the needed link between the Northeast Airfield and the terminal area.

Southeast Service Road and Spine Road Conversion: The proposed Southeast Service Road would be a secure airside road linking the South Cargo Area and the Southeast Services area to the terminal area. This would involve the conversion of Spine Road from a public road to a secure, airside service road and the construction of a new roadway link to close the gap between the existing airside service road and Spine Road. This project would eliminate the need for slow moving cargo vehicles and tugs to interact with other vehicles on a public roadway.

AVIATION ACTIVITY FORECASTS

The City of Chicago routinely prepares long-range projections of aviation activity to plan improvements, establish operating budgets, and support investment decisions. Forecasts are typically updated every five to ten years to reflect changes in the industry and the economy. The most recent forecast was prepared by the City of Chicago in 1998 and covers a 15-year period through the year 2012. It was accepted by the FAA for use in the EA and found to be within ten percent of FAA's 2001 Terminal Area Forecast (TAF) issued in January 2002. Although the TAF fluctuates from year to year, it is the best-known forecast by FAA based on current data. Refer to Section 1.7 and Appendix E of the EA for more information about the aviation forecasts.

The number of passengers boarding aircraft (enplanements) at O'Hare is forecast to increase at an average annual rate of 2.0 percent between 2000 and 2012, growing from 35.7 million to 45.1 million. The growth rate for international enplanements is projected to be much higher than for domestic enplanements – an average of 4.5 percent per year compared to 1.3 percent. The number of flights is projected to increase at an average rate of 0.6 percent per year, lower than the rate of growth in enplanements. This reflects the expected continuation of the trend toward using larger aircraft on existing routes rather than increasing the number of flights on those routes. The total number of operations (takeoffs and landings) is projected by the City to increase from 909,000 in 2000 to 982,500 in 2012.

The existing runway system and terminals can accommodate the projected number of aircraft operations, albeit with increasing flight delays. However, the existing airport terminal system cannot handle the projected increase in passengers without ever-increasing levels of inconvenience and inefficiency. The World Gateway Program was specifically developed to address the existing and expected shortcomings of the terminals through the forecast period.

3. AGENCY ACTIONS

The major Federal actions consist of the following:

- Unconditional approval of a revised ALP, based on determinations through the aeronautical study process regarding obstructions to navigable airspace, and no FAA objection to the airport development proposal from an airspace perspective.
- Federal environmental approval for the City of Chicago to establish eligibility to participate in funding through use of Federal AIP funds or PFCs for eligible projects, assuming the independent requirements of these programs are met.
- FAA review and issuance of findings on requests for conversion of airport property, “federally obligated land” for the non-aviation related development that is part of the Proposed Projects. Airport land becomes federally obligated when an airport owner accepts FAA grants. Before conversion of airport property for non-aviation use FAA must grant a land release.

The necessary Federal determinations and approvals are summarized below:

FAA determination that the Proposed Projects conform to FAA design criteria – The FAA works with the sponsor to insure that the Proposed Projects conform to FAA design criteria. Further, FAA approves protocols for maintaining coordination among sponsor offices, construction personnel, and appropriate FAA program offices, as required to ensure safety during construction.

FAA unconditional approval of the revised Airport Layout Plan (ALP) – The environmental decision by the FAA is necessary before FAA can give unconditional approval of the revised ALP for the projects contained in Chapter 2 and summarized in Exhibit 2-22 of the Final EA, which constitute the Proposed Projects. Unconditional approval also applies to the relocation of a number of facilities and uses as depicted on the revised ALP. As part of the ALP approval process, the FAA must also conduct an Airspace Review to evaluate the impacts of the Proposed Projects on Airport safety and efficiency, as well as needed changes in air traffic procedures (49 U.S.C. Section 40103, Section 40113, Section 47107 (a)(16)).

FAA aeronautical study of off airport improvements in accordance with 14 CFR Part 77 – The FAA undertakes a review of the Proposed Projects through the aeronautical study process to determine if there are any off-airport obstacles (e.g., light fixtures, buildings, tree or towers) that might be obstructions to the navigable airspace under the standards and criteria of 14 CFR Part 77.

FAA aeronautical study of on airport improvements in accordance with 14 CFR Part 157 -- The FAA undertakes a review of the Proposed Projects by evaluating the appropriateness of proposals for on-airport development from an airspace utilization

Finding of No Significant Impact / Record of Decision

and safety perspective based on aeronautical studies conducted pursuant to the processes under standards and criteria of 14 CFR Part 157.

FAA certification that air navigation facilities are reasonably necessary under 14 CFR Part 169 and U.S.C. Section 44502 – The FAA is required to certify that any air navigation facilities that are proposed are reasonably necessary for use in air commerce or for national defense purposes under 14 CFR Part 169 and 49 U.S.C. Section 44502 (b). Sometimes proposed development does not include new air navigation facilities. However, it is possible that some existing air navigation facilities may need temporary adjustments in operation and/or location during construction of the proposed development.

AIP and PFC Approvals – Federal environmental approval enables the City of Chicago to establish eligibility to participate in funding through use of Federal AIP funds or PFCs for eligible projects, assuming the independent requirements of these programs are met. The Federal environmental approval is necessary to proceed with processing of an application for 1) Federal funding for those development items qualifying under the former Airport and Airway Improvement Act of 1982, as amended and recodified at 49 U.S.C. Section 47101 et seq. and 2) approval for the collection and use of passenger facility charges under the former Federal Aviation Act, as amended and recodified at 49 U.S.C. Section 40117.

FAA Land Release –Federal environmental approval enables the FAA to approve the release of federally obligated land for non-aviation related projects. Land becomes federally obligated when an airport owner accepts FAA grants. Grants obligate the airport owner to use the property for aviation-related uses consistent with the latest approved ALP. The FAA must review and issue a finding on any request for the conversion of airport property for non-aviation use (49 U.S.C. Section 47107). The proposed releases of land shall be subject to the requirements set forth in 49 U.S.C. Section 47125.

FAA wetland findings and determination by the FAA in accordance with Executive Order 11990, Protection of Wetlands – Any impact to wetlands would necessitate a wetlands determination by the FAA in accordance with the above-mentioned Executive Order. FAA's determination would include that there be no undue burden (unusual circumstances) barring the sponsor (the Airport owner/operator) from obtaining a Section 404 permit for the filling of wetlands.

FAA Floodplain findings and determination in accordance with Executive Order 11998, Floodplain Management – Any impact to floodplains would necessitate a floodplains determination by the FAA in accordance with the above-mentioned Executive Order. FAA's determination would include that there be no undue burden (unusual circumstances) barring the sponsor (the Airport owner/operator) from obtaining a floodplain permit for the filling of and/or constructing within the floodplain.

Finding of No Significant Impact / Record of Decision

FAA findings regarding Section 7(c) of the Endangered Species Act of 1973, as amended (P.L. 85-624; 16 U.S.C. 661, 664, 1008) – The environmental decision by the FAA must include endangered species findings in accordance with the Endangered Species Act (ESA).

FAA determination of conformity in accordance with the Clean Air Act (42 U.S.C. Section 7506, Section 176 (c), and 40 CFR Part 93) – As, the Airport is located in an area designated as being in non-attainment for ozone ambient air quality standards, the FAA must make a determination of conformity with the State Implementation Plan (SIP), in compliance with the Clean Air Act.

FAA determination on National Pollutant Discharge Elimination System Permit compliance – The FAA must insure that in implementing and operating the Proposed Projects that there would be no undue burden (unusual circumstances) barring the sponsor (the Airport owner/operator) from obtaining a National Pollutant Discharge Elimination System (NPDES) permit for stormwater and wastewater discharges.

4. PURPOSE AND NEED

The identification of a Proposed Action's purpose and need is the primary foundation for the identification of reasonable alternatives and the evaluation of the impacts of the development. In exercising its authority and in the public interest, the FAA considers assigning, maintaining, and enhancing safety and security as its highest priority (49 U.S.C. Section 40101(d)). This is the FAA's first consideration in evaluating the purpose and need for any proposed airport improvements.

PURPOSE AND NEED FOR THE WORLD GATEWAY PROGRAM

The World Gateway Program is needed to respond to decreasing efficiency and passenger convenience in O'Hare's terminal area. Factors that have influenced these trends include increasing proportions of international passengers, the advent of alliances among domestic and international airlines, and the continuing transition to larger aircraft to serve the growing passenger demand in markets already served by high frequency flight schedules. Thus, facilities planned a decade or more ago do not match current needs, leading to unnecessary passenger inconvenience and airline inefficiencies.

The World Gateway Program is intended to upgrade terminal facilities to efficiently handle forecast passenger levels. The anticipated growth in aircraft operations (takeoffs and landings) during the forecast period can be handled by the existing airfield at O'Hare, although with increased airfield delays. Implementation of the World Gateway Program would not create a need for more runways. The World Gateway Program would allow the Airport to better serve the passengers that the existing airfield accommodates today and is expected to continue accommodating through the forecast period. More detail on the purpose and need for the World Gateway Program is found in Section 2.2 of the EA.

The purpose of the World Gateway Program is to meet three specific needs:

1. Improve gate availability and efficiency in the terminal area;
2. Improve connecting passenger convenience; and
3. Improve local passenger convenience.

Each need is discussed in more detail below.

The Need to Improve Gate Availability and Efficiency in the Terminal Area

Increasingly during busy periods, the gates available for arriving aircraft are either in the wrong terminal or are the wrong size for the aircraft. Aircraft must wait elsewhere on the airfield until a suitable gate is available. Without the World Gateway Program, this problem will worsen, leading to the use of remote aircraft parking positions to load and unload passengers. Remote aircraft parking positions require the use of shuttle buses to move passengers between the aircraft and the terminal building, which provide poorer service for passengers and less efficiency for airlines.

O'Hare's existing gate frontage lacks the flexibility to efficiently handle the changing aircraft fleet. Many of O'Hare's gates are designed for smaller aircraft such as the DC-9 or Boeing 727, with wingspans of 93 feet to 108 feet. The new Boeing 777, however, requires 200 feet of gate frontage. The airlines have been, and are expected to continue, substituting larger and more efficient aircraft for smaller ones to carry increasing numbers of passengers. This transition has, for the most part, already occurred in the commuter markets, where 50- to 70-seat regional jets have replaced the 19- to 30-seat turboprop aircraft.

The airlines are projected to continue the aircraft transition in the long-haul markets, where Boeing 757s, 767s, and 777s are replacing the smaller Boeing 727s. These new aircraft typically have wider wingspans and longer fuselages than the aircraft they are replacing. This is creating a need for additional gate frontage and greater gate depths to accommodate these larger aircraft. Due to O'Hare's lack of properly configured and properly located gates, flights are increasingly being held at the departure airport or are being required to wait on the airfield after landing for a gate to become available.

Overall, lack of gate availability can lead to passenger inconvenience, increased passenger travel time, more aircraft idling and emissions, higher costs, and increased aircraft activity into nighttime hours when Airport neighbors are generally more sensitive to noise. The World Gateway Program would improve gate availability and efficiency in the terminal area by providing additional gate frontage.

The Need to Improve Connecting Passenger Convenience

The current terminal configuration is inconvenient for connecting passengers. Connecting passengers experience increased travel times when their aircraft wait for available gates, and also when terminal facilities are congested. The World Gateway Program is intended to reduce or eliminate the need for connecting passengers to transfer between unconnected terminal buildings and to provide up-to-date terminal facilities to reduce congestion within the buildings.

The increase in the number of passengers and the increased importance of airline alliances have resulted in facilities that do not serve the passengers as well as originally intended. Arriving international passengers who must connect to domestic flights experience increased delay and inconvenience because they must transfer from Terminal 5, the only international arrivals terminal, to Terminals 1, 2, or 3 for domestic departing flights. This is becoming an increasing problem with the growing number of passengers on international flights. The continuing evolution of alliances between international and domestic carriers is increasing the number of arriving international passengers making connections to the domestic alliance partners located in one of the three domestic terminals. Unfortunately, because the domestic and international terminals at O'Hare are physically separated, passengers cannot fully benefit from the potentially "seamless" link offered by the alliances.

Virtually all arriving international flights must now go to Terminal 5. Arriving international passengers must proceed through all required Federal Inspection Services (FIS) or customs functions in Terminal 5 before continuing with their trip. If they are connecting to a domestic flight, they must re-check baggage in Terminal 5, and then travel to Terminal 1, 2, or 3 via the Airport Transit System (ATS), where they are required to pass through a security checkpoint before walking to their domestic gate and boarding their flight. Under the best of circumstances, this process is time-consuming, and inconvenient. If the arriving international flight is late, this journey can result in missed connections and additional expense.

This cumbersome connection process is mirrored on the airfield and aprons. Luggage must also be transported from Terminal 5 to the appropriate domestic terminal for the next leg of the trip. Furthermore, most of the Star and oneworld alliance partner aircraft arriving from international cities must be ferried from Terminal 5 to Terminal 1 or 3 to depart, thereby contributing to increasing congestion on the aprons and taxilanes. Because the fastest growing forecast passenger segment is the international sector, these inefficiencies are likely to become more serious problems in the future.

In order to improve connecting passenger convenience at O'Hare, the Airport needs to:

- Co-locate the airline alliance partners and provide additional FIS facilities
- Provide international gates in the terminal core

The Need to Improve Local Passenger Convenience

Passengers whose trips begin and end at O'Hare are experiencing increasing inconvenience from congested terminal corridors, FIS facilities, holdrooms, concessions, ticket counters, and baggage claim facilities during peak periods. The congestion is caused by the outdated design of the facilities, which were originally designed for fewer passengers in different-sized aircraft. The lack of available gates of the proper size, discussed previously, also creates problems for local passengers who experience delays while their aircraft wait for gates to become available.

In order to improve local passenger convenience at O'Hare, the Airport must reconfigure the existing terminals and concourses and develop new terminal facilities.

PURPOSE AND NEED FOR THE WORLD GATEWAY PROGRAM ENABLING PROJECTS

The following projects are defined as "Enabling Projects" because they are needed to implement the proposed World Gateway Program projects and would not otherwise be undertaken at this time. The purpose of the following projects is to relocate existing Airport service and support facilities to accommodate the City's proposed World Gateway Program. The World Gateway Program Enabling Projects and the sections where the detailed description of the purposes and needs of the Enabling Projects are located within the EA are as follows.

Finding of No Significant Impact / Record of Decision

- Delta Cargo Facility Relocation (See Section 2.3.2.1 of the EA)
- Lynxs Cargo Facility Relocation (See Section 2.3.2.2 of the EA)
- Sky Chefs Flight Kitchen Relocation (See Section 2.3.2.3 of the EA)
- Heating and Refrigeration (H&R) Support Facility Relocation (See Section 2.3.2.4 of the EA)
- Ameritech Switch Relocation (See Section 2.3.2.5 of the EA)
- ComEd Switchyard D179 Relocation (See Section 2.3.2.6 of the EA)

PURPOSE AND NEED FOR THE INDEPENDENT UTILITY PROJECTS

In addition to the World Gateway Program, the City has also identified several other airport projects that would improve services for Airport users, promote efficient use of Airport real estate, and generate revenue. These Independent Utility Projects would be needed regardless of whether or not the World Gateway Program is implemented. The Independent Utility Projects and the sections where the detailed description of the purposes and needs of the Independent Utility Projects are located within the EA are as follows.

- Public Parking Improvements (See Section 2.4.1 of the EA)
 - Expansion of the Elevated Parking Structure (EPS) (See Section 2.4.1.1 of the EA)
 - Lot E Parking Reallocation (See Section 2.4.1.2 of the EA)
- Consolidated Rental Car Facility/ATS Station (See Section 2.4.2 of the EA)
- Rental Car Storage and Maintenance (See Section 2.4.3 of the EA)
- ATS Storage and Maintenance Facility Relocation/Track Extension (See Section 2.4.4 of the EA)
- Long –Term Parking ATS Station and Intermodal Connection (See Section 2.4.5 of the EA)
- Additional Fuel Tank Farm Development in Northwest Airfield (See Section 2.4.6 of the EA)
- City Warehouse and Trades Building (See Section 2.4.7 of the EA)
- Eastside Collateral Development (See Section 2.4.8 of the EA)
- O'Hare Roadway Improvements (See Section 2.4.9 of the EA)
 - Lee Street/Northwest Tollway Interchange (See Section 2.4.9.1 of the EA)
 - Bessie Coleman Drive Realignment (See Section 2.4.9.2 of the EA)
 - Zemke Road Extension (See Section 2.4.9.3 of the EA)
 - Mannheim Flyover (See Section 2.4.9.4 of the EA)
 - Balmoral Avenue Extension (See Section 2.4.9.5 of the EA)
 - Airside Service Road Bridge (See Section 2.4.9.6 of the EA)
 - Southeast Service Road and Spine Road Conversion (See Section 2.4.9.7 of the EA)

5. ALTERNATIVES ANALYSIS

While the FAA does not have the authority to control or direct the actions and decisions of the City of Chicago relative to planning for the Proposed Projects, it does have the authority to withhold project approval, including Federal funding and the other Federal actions discussed in this ROD. It was from this perspective that the various alternatives were considered in terms of evaluating and comparing their impacts to determine whether there was an alternative superior to that proposed by the City of Chicago, or whether Chicago's proposal would cause impacts warranting disapproval of the Federal actions discussed in this ROD, including the withholding of Federal funds for the Proposed Projects.

ALTERNATIVES ENVIRONMENTALLY ASSESSED IN THE EA

Under the National Environmental Policy Act of 1969 (NEPA), the FAA has a responsibility to explore and objectively evaluate all prudent, feasible, reasonable, and practical alternatives, including those not within the jurisdiction of the Federal agencies.

For major Federal actions in which the Federal Government, as a proprietor, plans and develops a Federal facility, the scope of alternatives considered by the sponsoring Federal agency is wide ranging and comprehensive. However, where the sponsor is not the Federal Government, but is a local government or private applicant, the Federal agency role is necessarily more limited with substantial weight given to the preferences of the local sponsor.

Federal environmental review guidelines require the evaluation of all reasonable alternatives that might accomplish the objectives of a proposed project. Four categories of alternatives were considered in the evaluation of the terminal improvements and expansion elements of the World Gateway Program:

- No Action Alternative – Council on Environmental Quality (CEQ) regulations require that a No Action alternative be considered in the environmental assessment. This alternative assumes that none of the Proposed Projects would be constructed.
- Off-Site Alternatives – These alternatives entail new airport construction and the potential use of other existing airports (such as Gary, Midway, and Rockford Airport) to reduce demand at O'Hare.
- Non-Airport Alternatives – These include other modes of travel and advanced telecommunications.
- On-Airport Alternatives – This includes demand management alternatives, common-use and preferential-use gating at the existing terminals, and various development concepts at O'Hare.

No Action Alternative

It should be noted that NEPA requires that a No-Build/No-Action alternative be considered in the environmental assessment of impacts. Although not always prudent, the No-Action alternative is discussed as a potential alternative and serves as a baseline for the assessment of future conditions. See Section 3.1.1 of the EA for further details on the No Action alternative.

Off-Site Alternatives

Development at other airports was evaluated, but found not to be a reasonable alternative to the World Gateway Program. Even with substantial new development, other airports would not divert enough demand from O'Hare during the forecast period – especially connecting and international long-haul flights – to resolve O'Hare's existing needs. This option would also fail to address any of the Proposed Projects' purposes and needs: other airports would not provide improved gate availability and efficiency in the terminal area at O'Hare, improve connecting passenger convenience at O'Hare, or improve local passenger convenience at O'Hare.

For the same reasons, the construction of a new airport is not a reasonable alternative to the proposed World Gateway Program. The proposed new South Suburban Airport could potentially meet other needs, and a proposal for site approval and land acquisition by the State of Illinois for the South Suburban Airport is being evaluated accordingly by the FAA. See Section 3.1.2 of the EA for further details regarding Off-site alternatives.

Non-Airport Alternatives

Other modes of transportation, such as rail and highway, and advanced telecommunications were considered to be unreasonable alternatives for meeting the purpose and needs of the proposed World Gateway Program. See Section 3.1.3 of the EA for further details regarding Non-airport alternatives.

On-Airport Alternatives

Various on-Airport alternatives for addressing the purpose and need for the proposed World Gateway Program were considered. These ranged from non-construction alternatives, such as policies for managing demand, to different kinds of construction actions. Non-construction alternatives were found to be infeasible because of their limited impact on changing travel behavior. Other construction actions were found to be ineffective in meeting the purpose and need for the World Gateway Program. Alternative sites for the proposed terminal improvements were also considered but were found to be impractical or infeasible. See Section 3.1.4 of the EA for further details regarding On-Airport alternatives.

Alternatives to the Enabling Projects of the World Gateway Program and Independent Utility Projects

Alternate locations for the Enabling Projects and Independent Utility Projects were also evaluated to determine if they would have fewer environmental effects. These included undeveloped areas throughout the Airport. Refer to Sections 3.2 and 3.3 of the EA, respectively, for a detailed description of alternatives to the Enabling Projects and Independent Utility Projects.

6. ENVIRONMENTAL CONSEQUENCES AND MITIGATION

A detailed environmental analysis of the potential environmental impacts resulting from the implementation of the selected alternative was accomplished as part of the Environmental Assessment (EA). Two study periods were examined, 2007 and 2012. The World Gateway Program is anticipated to be fully operational in 2007-2008, with 2007 as the first full year in which new terminals would begin to come on-line. By 2012, all Proposed Projects, including the Independent Utility Projects, would be complete. Development that is not reasonably foreseeable at this time and not approved within this ROD, but which may become ripe at a later date, would be subject to appropriate environmental review at that time.

In accordance with 40 CFR 1505.3, the FAA will take appropriate steps, as described in this ROD, through Federal funding grant assurances and conditions, and ALP approvals, to ensure that the following mitigation actions as described herein are implemented during project development. The FAA will monitor the implementation of these mitigation measures as necessary. The approvals contained in this ROD are specifically conditioned upon full implementation of these mitigation measures. These mitigation actions will be made the subject of a special condition included in future airport grants to the City of Chicago.

IMPACTS AND MITIGATION

This chapter of the ROD includes a summary of environmental consequences and mitigation measures, which are discussed more fully in the EA, Chapters 5 and 6, for each environmental impact category.

The primary responsibility for implementation of the mitigation measures lies with the City of Chicago. The FAA will have oversight responsibility, conditions this approval upon implementation of that mitigation, and will further condition any grant agreements upon implementation of the mitigation measures by the City of Chicago. Mitigation measures for those impact categories where mitigation measures are necessary to avoid or minimize significant environmental impacts are summarized below. The FAA finds that all practical means to avoid or minimize environmental harm have been adopted, through appropriate mitigation planning, in accordance with all applicable environmental laws, regulations, and statutes.

Table R-2 outlines all of the projects included in No Action alternative and the Proposed Projects alternatives within the EA. The potential impacts of the Proposed Projects within each environmental category are summarized in this section.

**TABLE R-2
PROJECTS INCLUDED IN THE "NO ACTION" AND THE "PROPOSED PROJECTS" ALTERNATIVES^{a/}**

Project	1997 Baseline Conditions	2000 Existing Conditions	2007 Scenario		2012 Scenario	
			No Action	With Project	No Action	With Project
Existing airfield and support facilities	•	•	•	•	•	•
Existing Terminal, parking, and roadway facilities (Terminals 1, 2, 3, 5)	•	•	•	•	•	•
PREVIOUSLY APPROVED PROJECTS AT O'HARE (late 1980's through 2001)						
Terminal 1 Reconfiguration (late 1980's)	•	•	•	•	•	•
Post Office Facility along Irving Park Road	•	•	•	•	•	•
CTABlue Line Station in the terminal core	•	•	•	•	•	•
Terminal 5 Development	•	•	•	•	•	•
Terminal 5 surface parking Lot D and access roadway	•	•	•	•	•	•
Terminal 5 Upper Level Roadway Rehabilitation	•	•	•	•	•	•
Airport Transit System (ATS from Lot E to terminal core)	•	•	•	•	•	•
Commercial Vehicle Hold Area	•	•	•	•	•	•
Scenic Hold Pad	•	•	•	•	•	•
Runway 9R Hold Pad	•	•	•	•	•	•
Runway 27L Hold Pad	•	•	•	•	•	•
Runway 4R Angled Taxiway	•	•	•	•	•	•
Aircraft Rescue and Firefighting Training Facility (ARFF)	•	•	•	•	•	•
ARFF Storage/Simulator Training Facility	•	•	•	•	•	•
Helipad Commissioning	•	•	•	•	•	•
UAL Reservation Center/Credit Union	•	•	•	•	•	•
Long-term parking Lot E surface parking expansion	•	•	•	•	•	•
North Airfield drainage improvements winter basins	•	•	•	•	•	•
Runway Deicing Fluid Facility Improvements	•	•	•	•	•	•
Aircraft Ground Run-Up Enclosure (GRE)	•	•	•	•	•	•
Existing Metra Station	•	•	•	•	•	•
Expansion of AMC building, north side	•	•	•	•	•	•
Bessie Coleman Widening	•	•	•	•	•	•

**TABLE R-2 (CONTINUED)
PROJECTS INCLUDED IN THE "NO ACTION" AND THE "PROPOSED PROJECTS" ALTERNATIVES^{a/}**

Project	1997 Baseline Conditions	2000 Existing Conditions	2007 Scenario		2012 Scenario	
			No Action	With Project	No Action	With Project
O'Hare Express Center (southeast)		•	•	•	•	•
RPZ Wetland Management Plan		•	•	•	•	•
Commercial Vehicle Holding Area Improvements			•	•	•	•
350 Vehicle Limousine Holding Area Relocation Further N, opposite Lot E			•	•	•	•
Service Road Upgrades			•	•	•	•
Northwest Airlines Cargo Building Expansion			•	•	•	•
Hangar Area Salt Dome			•	•	•	•
UAL GSE Building			•	•	•	•
GPS Antenna			•	•	•	•
UAL Mail-Sort Relocation			•	•	•	•
360 degree SGI Based Tower Simulator			•	•	•	•
Replacement GA Terminal Building			•	•	•	•
Pumping Station			•	•	•	•
Touhy Detention Basin/Structure 140/Relocation of Willow-Higgins Creek			•	•	•	•
Balmoral Ave. Extension – Phase I; Truck Staging Area			•	•	•	•
UAL Headquarters (Phase I) and associated roadway improvements:			•	•	•	•
- Mannheim Road: Continuous SB through and right turn lane from Higgins to Zemke			•	•	•	•
- Mannheim Road: Extension of NB left turn lane at Zemke			•	•	•	•
- Zemke Road: Addition of 2 nd left turn lane on EB Zemke			•	•	•	•
- Zemke Road: Addition of WB through lane on Zemke at Mannheim Road			•	•	•	•
- Zemke Road: Right turn-only from EB Zemke to SB Mannheim Road			•	•	•	•
- Zemke Road: Right turn-only from EB Zemke to SB Bessie Coleman			•	•	•	•

**TABLE R-2 (CONTINUED)
PROJECTS INCLUDED IN THE "NO ACTION" AND THE "PROPOSED PROJECTS" ALTERNATIVES^{a/}**

Project	1997 Baseline Conditions	2000 Existing Conditions	2007 Scenario		2012 Scenario	
			No Action	With Project	No Action	With Project
- Bessie Coleman Drive Addition of right turn lane onto EB Zemke Road		•	•	•	•	•
- Johnson Road: Extension to the east with a right turn only to SB Mannheim Road			•	•	•	•
Lot E Long-Term Remote Parking Structure			•	•	•	•
Temporary Lot G Long-Term Parking			•	•	•	•
Extension of Concourse F/Terminal 2			•	•	•	•
Terminals T1, T2, T3 Face Improvements			•	•	•	•
Various Terminal Improvement Projects/Rehabilitation		•	•	•	•	•
Various Runway/Taxiway Re-surfacing/Rehabilitation Projects		•	•	•	•	•
Hydrant fueling Improvements/Super Satellite Station Removal			•	•	•	•
New Police Facility ^{b/}			•	•	•	•
Concourse L Hold Room Expansion			•	•	•	•
Helipad Decommissioning			•	•	•	•
O'Hare Express North/Willow-Higgins – Centerpoint Development ^{e/}			•	•	•	•
WORLD GATEWAY PROGRAM PROJECTS						
Terminal 2 Redevelopment & Apron Reconfiguration / Co-location of FIS Facilities						•
Terminal 3 / Concourse K Extension & Apron Reconfiguration / Co-location of FIS Facilities / Taxiway A/B Reconfiguration				•		•
Terminal 4 Development & Apron Reconfiguration / Co-location of FIS Facilities						•
Terminal 5 Reconfiguration				•		•
Terminal 6 Development & Apron Reconfiguration / Taxiway Extension / Terminal 5/6 Access Road / Terminal 6 Parking Garage / Terminal 6 ATS Realignment and Station ^{d/}				•		•
WORLD GATEWAY PROGRAM ENABLING PROJECTS						
Delta Cargo Facility Relocation				•		•

**TABLE R-2 (CONTINUED)
PROJECTS INCLUDED IN THE "NO ACTION" AND THE "PROPOSED PROJECTS" ALTERNATIVES ^{a/}**

Project	1997 Baseline Conditions	2000 Existing Conditions	2007 Scenario		2012 Scenario	
			No Action	With Project	No Action	With Project
Lynxs Cargo Facility Relocation/North Airfield Cargo Development				•		•
Sky Chefs Flight Kitchen Relocation				•		•
H&R Support Facility Relocations						
- ComEd Switchyard D177				•		•
- City Substation RB40 Relocation				•		•
- Cooling Towers Relocation				•		•
- Chicago Transit Authority Substation Relocation				•		•
Ameritech Switch Relocation				•		•
ComEd Switchyard D179 Relocation				•		•
INDEPENDENT UTILITY PROJECTS FOR WHICH ENVIRONMENTAL APPROVAL IS SOUGHT THROUGH THIS EA						
City Warehouse and Trades Building				•		•
Expansion of Elevated Parking Structure (EPS)				•		•
Lot E parking Reallocation				•		•
Consolidated Rental Car Facility/ATS Station				•		•
Rental Car Storage and Maintenance Facility and Bridge over Mannheim Road				•		•
ATS Storage and Maintenance Facility Relocation/Track Extension				•		•
Long-Term Parking ATS Station and Intermodal Connection				•		•
Additional Fuel Tank Farm Development in Northwest Airfield				•		•
Eastside Collateral						
- 50% build-out				•		•
- remaining 50% build-out						•
O'Hare Roadway Improvements						
- Lee Street/Northwest Tollway Interchange (addition of Lee St. on-ramp to WB I-90 and EB I-90 off-ramp to Lee St.)			•	•	•	•
- Bessie Coleman Drive Realignment				•		•

**TABLE R-2 (CONTINUED)
PROJECTS INCLUDED IN THE "NO ACTION" AND THE "PROPOSED PROJECTS" ALTERNATIVES ^{a/}**

Project	1997 Baseline Conditions	2000 Existing Conditions	2007 Scenario		2012 Scenario	
			No Action	With Project	No Action	With Project
- Zemke Road Extension				•		•
- Mannheim Flyover				•		•
- Balmoral Avenue Extension (SB Ramps at Mannheim; extend from Mannheim to Bessie Coleman)				•		•
- Airside Service Road Bridge				•		•
- Southeast Service Road and Spine Road Conversion				•		•
ADDITIONAL ROADWAY IMPROVEMENTS BY OTHERS						
Mannheim Road: Widening of Mannheim Road to 3 lanes each direction between Zemke and Irving Park			•	•	•	•
Addition of Partial Interchange on I-294 at Devon avenue (add SB off-ramp to Devon)			•	•	•	•
Expansion of I-90 Interchange at Elmhurst Road (add Elmhurst Road on-ramps to WB I-90 and EB I-90 off-ramps to Elmhurst Road)			•	•	•	•
Balmoral Tunnel ^{e/}			d/	d/	d/	d/
I-190 Improvements				•		•
OTHER PROJECTS						
High Density Rule (HDR changes [Air-21])			•	•	•	•
Air Traffic Control Procedures						
- New Airport Traffic Control Tower (ATCT) – completed 1996	•	•	•	•	•	•
- Chicago Terminal Airspace Project (CTAP)		•	•	•	•	•
- LAHSO	•	•	•	•	•	•
O'Hare Noise Abatement Procedures						
- Residential and School Sound Insulation Program ^{f/}	•	•	•	•	•	•
- Fly Quiet Program – Nighttime Preferential Runway and Flight Track Program	•	•	•	•	•	•
Phase-out of Stage 2 Aircraft		•	•	•	•	•
Military Base Relocation to Scott AFB		•	•	•	•	•
Regional Development Traffic ^{g/}			•	•	•	•

**TABLE R-2 (CONTINUED)
PROJECTS INCLUDED IN THE "NO ACTION" AND THE "PROPOSED PROJECTS" ALTERNATIVES^{a/}**

Project	1997 Baseline Conditions	2000 Existing Conditions	2007 Scenario		2012 Scenario	
			No Action ^{b/}	With Project ^{b/}	No Action ^{b/}	With Project ^{b/}
West Perimeter Road at O'Hare			∕	∕	∕	∕
Demolition of Surplus Structures Associated with the Former O'Hare Air Reserve Forces Facility			∕	∕	∕	∕

^{a/} Projects assumed in the No Action and Proposed Projects ("With Project") alternatives. For a complete listing of projects at O'Hare refer to the City of Chicago's Passenger Facility Charge (PFC) Application Amendment dated November 17, 2000. Not listed here are individual runway, taxiway, apron, and facility rehabilitation and terminal upgrade/improvement projects. Some projects may appear in more than one PFC application.

^{b/} The location of new police facility recently has been proposed to be moved from where it had been approved under a previous Categorical Exclusion. The new location has been subject to a cumulative impact analysis, but it remains conditionally approved on the revised ALP.

^{c/} The *Final Environmental Assessment for the O'Hare Express North* development was completed in January 2002. A Finding of No Significant Impact was issued on January 28, 2002.

^{d/} A triturator currently located in the Terminal 5 Ground Support Equipment (GSE) area would be relocated to an area on the eastern edge of the Terminal 6 Apron as a component of this project.

^{e/} The Village of Rosemont has proposed to develop a tunnel under Mannheim Road to serve traffic seeking to go from southbound Mannheim Road to eastbound Balmoral Avenue. Rosemont is planning to seek environmental approval for this project. It is not expected to affect traffic volumes in any scenario.

^{f/} The 1997/2000/2007/2012 noise impact analyses include all sound insulated homes.

^{g/} Anticipated regional development as evaluated by the Chicago Area Transportation Study (CATS) during the forecast period. This development includes, for example, further development within Rosemont.

^{h/} The Airport plans to upgrade an existing on-airport road along the west side of the Airport. These upgrades are necessary to ensure required security and emergency access, and will also support airport maintenance. It is uncertain as to when this project might be pursued. The potential cumulative impacts to wetlands and other resources are considered in this EA.

^{i/} Some former military buildings located in the Military Site, including buildings along the alignment of the proposed Bessie Coleman Drive, are being removed by the City as an independent project to enhance safety and security. The FAA has prepared a Categorical Exclusion for this project. The potential cumulative impacts are considered in this EA.

Noise

Noise levels would be reduced with implementation of the Proposed Projects through improved efficiency in airport operations. Fewer housing units and residents would be located within the 65 decibel Day-Night Average Sound Level (DNL) contour with the Proposed Projects than with the No Action Alternative in both 2007 and 2012 because of the reduction in flight delays that would otherwise force some flights into the nighttime hours. The noise contours with the Proposed Projects in 2007 and 2012 are slightly smaller than the noise contours without the Proposed Projects except in one area, along the northeast side of the contour off the approach end of Runway 27R. The affected area is along I-190 and covers less than 0.002 square miles (1.8 acres) in 2007 and less than 0.01 square miles (7.6 acres) in 2012. The area contains highway infrastructure and a small portion of the Des Plaines Forest Preserve, which is compatible with this noise level. No homes or population would be affected.

Airport noise is expected to decline over the next several years because of the continued transition from louder, hush-kitted Stage 3 commercial aircraft to quieter, new generation Stage 3 aircraft. Under existing conditions in the year 2000, approximately 37.6 square miles of land (including 26,056 housing units) are within the 65 DNL contour. In 2007, this would decrease to 23.5 square miles and include 10,949 housing units with implementation of the Proposed Projects. In 2012, the 65 DNL contour would include 23.8 square miles, but fewer housing units, 10,612. The 2012 contour increases in size very slightly along the approaches to Runways 4R, 27R, 22R, 14R, 9R, and 32L with the Proposed Projects, because there would be more operations in 2012 than 2007 with or without the Proposed Projects. Most of the area of increase is compatible land use. The 65 DNL contour decreases in size slightly along the departure tracks for Runways 22L and 9R. The affected areas are residential.

In both forecast years, the Proposed Projects would reduce the number of housing units within the 65 DNL noise contour. Furthermore, reductions would occur in all three noise contour ranges, 65 to 70 DNL, 70 to 75 DNL, and 75 DNL and above. The total number of dwellings within the 65 DNL contour would decrease by 6.2 percent in 2007 and 11 percent in 2012 with the Proposed Projects. The noise reduction is attributable to the reduced number of flights that would operate during the nighttime hours with the Proposed Projects.

Land Use

Most of the Proposed Projects are located well within Airport boundaries and would have no direct adverse aesthetic or visual impact on neighboring land uses. Due to the mix of industrial, commercial, and office land uses within the Airport property and throughout the neighboring area, the Proposed Projects are expected to be fully compatible with existing and proposed land uses. Four of the Proposed Projects (Mannheim Flyover, Long-Term Parking ATS Station, Rental Car Storage & Maintenance, ATS Storage & Maintenance Facility) would be adjacent to a residential

neighborhood in Rosemont. However, aesthetic, noise, and visual impacts would be minimal, and appropriate site planning would be used to minimize any possible impacts.

Surface Transportation

The Proposed Projects involve the extension and relocation of roadways on the Airport and in the immediate vicinity. Access to the terminal core and surface parking areas would be improved through implementation of the Proposed Projects, and congestion in the terminal core area would be reduced. In addition, the proposed roadway improvements would generally improve traffic flow on roadways in the Airport area, including on-Airport roads. No intersections or roadway links would experience significantly worse conditions as a result of the Proposed Projects.

The surface transportation analysis considered the potential cumulative impact of the other future development that is likely to occur in the Airport area, and analyzed the effects on traffic of other planned roadway improvements under study by other agencies. The analysis found that the Proposed Projects would have no significant impact on surface transportation, even with the cumulative effects to be expected from these other potential developments.

Social Impacts/Induced Socioeconomic Impacts/Environmental Justice

No property would need to be purchased in order to implement the Proposed Projects. Some on-Airport businesses, however, would be relocated in conjunction with the Proposed Projects. The useable space in the replacement facilities would be the same as or larger than their present facilities. No down time would be experienced by these businesses during the relocation process. The Proposed Projects would create at least 8,000 new construction jobs and an estimated 800 to 1,200 new permanent jobs to operate and maintain new facilities and services. No low income or minority populations would be adversely or disproportionately affected by implementation of the Proposed Projects.

Air Quality

The Proposed Projects would reduce total Airport emissions by improving Airport operations and by improving traffic flow on local roads. Other operational improvements would be incorporated to reduce emissions from ground support equipment (GSE) and during aircraft fueling operations at gates. By 2012, when the Proposed Projects are expected to be completed, emissions at the Airport would be reduced compared to the No Action alternative. **Table R-3** shows estimated emissions for Airport activities in 2000 compared with projections for the years 2007 and 2012 with and without the Proposed Projects.

**TABLE R-3
EXISTING AND FORECAST EMISSIONS**

Pollutant	2000 Estimated (tons per year)	2007 (tons per year)		2012 (tons per year)	
		No Action Alternative	Proposed Projects	No Action Alternative	Proposed Projects
Volatile Organic Compounds (VOCs)	2,051.3	1,560.2	1,490.8	1,500.2	1,386.9
Nitrogen Oxides (NO _x)	6,948.9	8,008.3	7,897.1	8,826.0	8,624.4
Carbon Monoxide (CO)	16,401.8	15,818.0	15,291.4	15,720.1	14,927.9
Sulfur Dioxide (SO ₂)	288.8	322.7	312.2	366.8	346.7
Particulate Matter (10 microns or less in diameter (PM10))	102.7	96.7	93.8	88.8	86.5

Dispersion modeling results for the 2007 and 2012 Proposed Project alternatives indicate that ambient pollutant concentrations near the Airport would be below National Ambient Air Quality Standards (NAAQS). Maximum concentrations for nitrogen oxides, 1-hour and 8-hour carbon monoxide concentrations, 24-hour and annual particulate matter (PM10) concentrations, and maximum 3-hour sulfur dioxide concentrations would all be well below their respective NAAQS. Estimated maximum CO concentrations at all of the intersections analyzed with the Proposed Projects for 2007 and 2012 forecast conditions would be below the NAAQS.

The Proposed Projects were evaluated under the General Conformity Rule, which ensures that federal actions are considered within the Illinois State Implementation Plan (SIP). Under the General Conformity Rule, a project does not require a conformity determination if the increase in emissions due to a proposed Federal action is below de minimis thresholds. In a severe ozone non-attainment area (such as the Chicago region), the de minimis threshold for ozone precursor pollutants, volatile organic compounds (VOC), is 25 tons per year. In addition to the de minimis test, a conformity determination is also required if the increase in emissions due to the project would make the project "regionally significant," i.e., equal to or exceeding ten percent of the total emission inventory for the entire non-attainment area. Finally, the project must not create or exacerbate any violation of the NAAQS.

The emission inventory indicates that implementation of the Proposed Projects would cause VOC emissions to decrease, and will not cause construction emissions to exceed 25 tons per year for any year. Thus, the project-related VOC emissions will be less than the de minimis threshold in all years. The analysis also found that the Proposed Projects are not regionally significant for purposes of conformity (i.e., it would

have less than 10 percent of regional emissions of VOCs). The dispersion modeling analysis demonstrated that all predicted concentrations would be less than their respective NAAQS. Therefore, the Proposed Projects would comply with the General Conformity Rule and would be in conformity with the SIP.

In addition, the Proposed Projects are expected to reduce air toxic emissions. The reduced aircraft idling times associated with the World Gateway Program would lead to lower emissions. Further, air toxic emissions are expected to decrease with time. Newer aircraft turbine engines are more fuel efficient, and, over time, VOC emissions from aircraft engines are expected to decrease at O'Hare. The VOC emissions from motor vehicles using O'Hare are also expected to decrease due primarily to the mandatory Federal Motor Vehicle Emissions Control Program. Thus, VOC emissions from the Airport are expected to be 32 percent lower in 2012 than today.

For the purpose of assessing cumulative impacts under NEPA, VOC emissions due to construction activities from independent projects that FAA has environmentally reviewed and which will occur during the World Gateway Program construction period are presented in Section 5.6 of the EA. The year with the highest VOC emissions due to cumulative construction activities is 2003, with an annual total of 26.33 tons per year, which is less than one percent of regional construction emissions provided for in the Illinois SIP. Under the General Conformity Rule, projects independent of the Proposed Projects are not included in the conformity analysis. The assessment of those projects that are independent of the Proposed Projects is for the purpose of assessing cumulative impacts under NEPA. During years of construction, there is a temporary increase in emissions due to construction activities. However, due to the Proposed Projects, overall emissions are decreased during the future project years of analysis.

Water Quality

Minor impacts to water quality would result from an increase in paved areas and changes in the types of activities performed within various areas of the Airport. The Proposed Projects would be designed to collect and channel stormwater runoff and other drainage into the Airport's stormwater management system. Additional detention basins and other water control structures would be built if necessary to manage the rate of stormwater runoff to avoid increasing the risks of downstream flooding. Stormwater from any new areas (e.g., new apron areas) in which deicing fluids would be used will be directed to sanitary sewers for treatment during the deicing season when deicing fluids are present. Relocation of some of the sanitary sewers on Airport property would be undertaken to support some of the proposed development. Strict adherence to the Airport's Best Management Practices (BMPs) for protecting water quality (reprinted in Appendix P of the EA, Best Management Practices Used at Chicago O'Hare International Airport) for cargo handling, truck loading/unloading, equipment/vehicle fueling, vehicle parking, aircraft fueling, aircraft deicing, airfield and roadway deicing, floor wash down, general waste storage, and spill response would ensure an insignificant change in contaminant concentrations in stormwater runoff.

Temporary water quality effects are possible during construction. These would be controlled and minimized through facility design features intended to control and collect any stormwater runoff or site-related pollutants, use of the Airport's current stormwater management program, and the use of BMPs (for example, use of silt fencing, etc.) during construction.

All measures necessary to mitigate impacts on water quality are being designed into the Proposed Projects or will be undertaken during construction through the implementation of BMPs for the management of stormwater. The City has applied for renewal of its National Pollution Discharge and Elimination Systems (NPDES) permit for stormwater discharges and facility operations at the Airport. The City also holds a NPDES permit for site construction activities, as required by Illinois Environmental Protection Agency (IEPA) for all construction projects of more than five (5) acres. The City will also apply for Section 401 water quality certification from IEPA concurrently with its application to the U.S. Army Corps of Engineers (USCOE) for Section 404 permits for impacts to wetlands and Waters of the United States.

Section 4(f)/49 U.S.C. 303(c) / 6(f) Properties / Historic, Architectural, Archaeological, and Cultural Resources

No significant impacts to 4(f) properties (i.e., parklands, recreation areas, historic sites, or wildlife and waterfowl refuges), 6(f) properties (i.e., properties acquired or developed with Land and Water Conservation Fund Act monies), or properties currently listed or eligible for listing on the National Register of Historic Places (NRHP) would occur as a result of the Proposed Projects.

Biotic Communities / Threatened and Endangered Species

Some of the Proposed Projects involve paving and construction of facilities within currently vegetated areas. These areas are a mixture of disturbed woodlands, meadows, lawns, wetlands, and degraded streams that provide limited urban wildlife habitat. All of these areas have been substantially disturbed in the past and do not contain quality native vegetation that supports wildlife species of concern or species listed as state or federally threatened or endangered. No species currently listed as federally threatened or endangered have been observed at the Airport. Several state-listed threatened and endangered bird species have been observed at the Airport. However, no nests have been observed in the areas proposed for development and no impacts to these species would result from the Proposed Projects.

Wetlands and Waters of the United States

All measures to avoid and minimize impacts to wetlands and Waters of the United States (i.e., streams) have been included in the planning for the Proposed Projects. However, unavoidable impacts, including the placement of fill within wetland boundaries and changes in hydrology caused by earthmoving and land development activities, would occur with the proposed development. A maximum of 3.19 acres of

wetlands, primarily emergent in character (dominated by grass-like plants, not trees or shrubs) would be impacted by the Proposed Projects. In addition, Willow Creek would be bridged in one location by construction of a taxiway to the relocated Lynxs Cargo facility. Joint permits from the Chicago District of the USCOE and the IEPA will be obtained under the Clean Water Act to authorize impacts to Waters of the United States, including jurisdictional wetlands.

The impacted wetlands are of low quality, involving very little, if any, native vegetation, minimal species diversity, limited stormwater storage, and provide little wildlife habitat. Nevertheless, the City intends to mitigate the adverse impacts on wetlands through the purchase of offsite wetlands acreage. Off-site mitigation is expected to involve a mitigation ratio of 1.5 acres of acquired wetlands for each acre of wetland impact at the Airport. Using this ratio, it is anticipated that mitigation would entail purchase of 4.79 acres of offsite wetlands. Wetland mitigation on the Airport was evaluated and determined to be not feasible because wetlands attract birds and other wildlife that pose a potential safety hazard to aircraft operations.

Other projects on the Airport may also impact wetlands and Waters of the United States. The total cumulative acreage of impacted wetlands on Airport property from these projects, including the World Gateway Program, is 26.31 acres. The City has committed to the mitigation of these impacts through the purchase of wetlands mitigation bank credits or offsite wetlands acreage concurrent with the implementation of the projects that impact wetland acreage. The total amount of committed compensatory mitigation (planned and/or implemented) is 35.925 acres.

Floodplains

The Proposed Projects will incorporate stormwater detention systems, as needed and as required by the City of Chicago Department of Environment, to ensure that any additional runoff caused by increases in impervious area would be contained on-site during storms and released more slowly, thus avoiding flooding impacts downstream.

Some of the Proposed Projects would encroach into the existing 100-year floodplain along Willow-Higgins Creek. These include the Lynxs Cargo Facility Relocation, the Eastside Collateral Development, the Lee Street/Northwest Tollway Interchange, and the Bessie Coleman Drive Realignment. However, the City has received approval for the construction of the Touhy Avenue Detention Basin and Structure 140 in the North Airfield for flood control. (Structure 140 is now under construction and the Touhy Avenue Detention Basin started in May 2002.) After construction, these projects will greatly reduce the size of the floodplain on the Airport. With full development of the Touhy Avenue Detention Basin and Structure 140, neither the Eastside Collateral Development nor the Bessie Coleman Drive Realignment would encroach into the floodplain. The Lee Street/Northwest Tollway Interchange and Lynxs Cargo Relocation would encroach upon approximately 4.8 acres of floodplain with the new flood control projects in place. In addition, the taxiway bridge to the relocated Lynxs Cargo Facility would impact the Willow Creek floodway.

The City will comply with the requirements of the City of Chicago Department of Environment in meeting the requirements of the City's flood control regulations. Compensatory flood storage will be included in the design of the facilities that encroach into the long-term floodplain. The ratio of compensatory to displaced flood storage will be 1.5:1.0. These requirements will be met at the time each encroaching project is developed, and will be based on the size of the affected floodplain. If necessary, prior to the completion of Touhy Avenue Detention Basin and Structure 140, temporary flood storage capacity will be provided for projects that encroach upon the existing floodplain. If applicable, the specific amount of required compensatory flood storage volume and locations would be determined during the process of securing the necessary permits from the City of Chicago Department of Environment.

The Proposed Projects will have no significant adverse impact on the beneficial values of the floodplains.

Coastal Resources, Wild and Scenic Rivers, and Farmland

No impacts to these categories are anticipated by the Proposed Projects.

Energy Supply and Natural Resources

Projects implemented under the World Gateway Program would reduce aircraft fuel demand through the elimination of aircraft ferrying between Terminal 5 and Terminals 1, 2, and 3 and through the addition of gates to reduce aircraft ground delay (i.e., aircraft waiting for gates to be made available). The construction and operation of new and reconfigured passenger terminals would cause a net increase in the demand for electricity and natural gas for lighting, heating, and cooling. This would not increase demand beyond the capacity of local supply reserves.

The City intends to incorporate sustainable development principles into the design of the new and reconfigured terminals. These include the use of recycled materials and renewable resources, high-efficiency energy systems, energy conservation, and passive solar heating. After construction of the World Gateway Program, all aircraft parking positions at the terminal will be served with hydrant fueling systems, reducing the need for fuel trucks to operate in the terminal area. All gates will also be equipped with preconditioned air and power systems to connect to aircraft, minimizing the need for aircraft to operate auxiliary power units. These features will conserve energy and reduce emissions. The new facilities will also support the City's initiatives to convert ground support equipment and shuttle buses to burn cleaner fuels, such as compressed natural gas, by providing opportunities for alternative fueling infrastructure.

Light Emissions

New lighting proposed as part of the Proposed Projects will be low intensity (e.g., taxiway and ramp edge lighting) or consistent with the kind of lighting found in any developed urban area (e.g., roadway, parking lot, and building lighting). Concentrated

residential developments already experience relatively high ambient light levels. New lighting will be shielded and directed away from residential areas. Therefore, these areas are unlikely to be significantly affected by the marginal additions to lighting caused by the Proposed Projects.

Solid and Hazardous Waste

The Proposed Projects would generate demolition and construction debris and general waste during construction. These wastes, along with solid wastes generated by the occupancy and use of the new terminal areas and other facilities, would be disposed of according to applicable Federal, state, and local regulations. Disposal of this increased amount of solid waste would not interfere with or place a burden on existing waste disposal facilities.

International wastes resulting from aircraft operations originating in foreign countries are subject to specific handling procedures before being processed for recycling or sent to area landfills. These wastes must go through a sterilization process, which can include heating the waste to a specific temperature. Currently, international waste is shipped to Indianapolis, Indiana to be sterilized. Any materials containing international solid waste would be handled as international waste and treated as required by Federal regulation prior to disposal.

Each proposed project has been evaluated to determine the best management practices required to address asbestos-containing materials, lead-based paint, subsurface contamination, and the presence of aboveground or underground storage tanks before and during the construction process. Removal and disposal of these materials will be accomplished according to applicable Federal, state, and local regulations without significant impacts to the capacity of existing disposal sites.

At a minimum, a Phase I Environmental Site Assessment in accordance with American Society for Testing Materials standards of practice will be performed at each project location to assess the presence of "recognized environmental conditions" associated with past use of the properties. Based on those findings, additional environmental investigations may be required to locate and quantify potential subsurface contamination. If required, appropriate corrective action procedures would be completed in accordance with all applicable rules and regulations.

Construction Impacts

Impacts associated with construction include actual construction, equipment noise, equipment emissions, dust emissions, disruption of surface traffic patterns, and disturbance of water quality. These impacts are temporary and are not expected to become permanent adverse impacts on the natural and social environment. This EA specifically examined the potential impacts on air quality associated with the operation of construction equipment and the effect of construction activities on water quality. No

significant adverse impacts are anticipated. The only impacts would be short-term and would be minimized through the use of BMPs.

Cumulative Impacts

The EA considers cumulative impacts of the Proposed Projects when added incrementally to other past, present, and reasonably foreseeable actions. Other projects and programs proposed by other entities (i.e., IDOT/FHWA, Illinois State Toll Highway Authority, FAA, or city governments) include general urban development, major highway and expressway projects, and on-Airport development projects.

Assessment of the impacts of the Proposed Projects took into consideration changes in traffic volumes and travel patterns within the surrounding area. For example, impacts of proposed improvements to I-190, the I-90 Interchange at Elmhurst Road, the new Tri-State (I-294) Tollway Interchange to Devon and Higgins Road, widening of Mannheim Road, and a proposed tunnel from southbound Mannheim Road to Balmoral Avenue have been considered as part of the analysis in this EA. Even when considered in this cumulative context, the Proposed Projects would not cause significant impacts on air quality or surface transportation.

Impacts of other reasonably foreseeable projects on wetlands and waterways under the jurisdiction of the USCOE are not expected to cause significant adverse cumulative impacts in combination with the Proposed Projects. If necessary, individual projects would obtain the appropriate Section 404 permit from the USCOE and develop the appropriate type of mitigation to offset adverse wetland impacts. No significant effects to habitat are anticipated. In any event, much of the remaining wildlife habitat in the area is along the Des Plaines River and is protected as Cook County Forest Preserve property. Additional urban development could also increase the amount of impervious surfaces and increase stormwater runoff. However, local regulations require the installation of stormwater detention basins to capture the increased runoff. The cumulative impacts of such development on these local resources in combination with the Proposed Projects would not be significant.

The World Gateway Program is independent of the proposed long-term concept including runways. Thus, it is not a connected action that requires a single environmental review under NEPA. Detailed cumulative environmental and other analysis of the long-term concept would be speculative at this time, because planning, approvals, analysis and other requirements for the concept plan have not been completed. The long-term concept is not known with sufficient specificity to conduct a detailed analysis at this time. Additionally, the entire concept is subject to numerous and considerable uncertainties.

Specific analysis of impacts associated with the long-term concept – including runway relocation, configuration, design, timing, and use – is premature at the present time. In the absence of specific information about these parameters, detailed environmental analysis would be highly speculative. If and when the project is ready for detailed

Finding of No Significant Impact / Record of Decision

environmental analysis, all environmental reviews required by law will be conducted and presented in an EIS. The EIS will take into account any cumulative impacts that may result from the development of runway improvements when added to any impacts associated with the Proposed Projects of the World Gateway Program.

Mitigation Measures

The following Table R-4 is a summary of the proposed mitigation measures and commitments that will be implemented as a part of the Proposed Projects.

**TABLE R-4
PROPOSED MITIGATION/COMMITMENTS**

Environmental Resource	Impact	Proposed Mitigation/Commitments
Noise	No impacts	None required
Compatible Land Use	Four projects would be adjacent to a residential neighborhood in Rosemont. Aesthetic, noise, and visual impacts would be minimal.	Site planning would be used to minimize any possible impacts.
Surface Transportation	No significant impacts	None required
Social Impacts/Induced Socioeconomic Impacts/Environmental Justice	Three existing on-Airport businesses would be relocated with the World Gateway Program: Sky Chefs Flight Kitchen, Lynxs Cargo Facility, and Delta Cargo Facility.	The FAA will require the City of Chicago to provide fair and reasonable relocation assistance to the extent required by the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act. The Airport proposes to cover the moving expenses and construction costs for the replacement facilities. The square footage of the new facilities usable by the tenants would be equal to or larger than the current facilities. Tenants would pay for additional square footage beyond what is available in their current facilities.
Air Quality	No impacts	None required
Water Quality	Minor impacts to water quality would result from an increase in paved areas and changes in the types of activities performed within various areas of the Airport.	Strict adherence to the Airport's Best Management Practices (BMPs) for protecting water quality from cargo handling, truck loading/unloading, equipment/vehicle fueling, vehicle parking, aircraft fueling, aircraft deicing, airfield roadway and deicing, floor wash down, general waste storage, and spill response will be implemented to ensure an insignificant change in contaminant concentrations in stormwater runoff.
U.S.C. Section 303(c) Lands (formerly known as Section 4(f))	No impacts	None required
Historic, Architectural, Archaeological, and Cultural Resources	No impacts	None required
Biotic Communities	No impacts	None required
Endangered and Threatened Species of Flora and Fauna	No impacts	None required

Finding of No Significant Impact / Record of Decision

**TABLE R-4
PROPOSED MITIGATION/COMMITMENTS**

Environmental Resource	Impact	Proposed Mitigation/Commitments
Wetlands	The Proposed Projects will impact a total of approximately 1.90 acres of jurisdictional wetlands, as well as a total of 1.29 acres of non-jurisdictional wetlands.	The mitigation plan calls for replacing the filled wetlands with credits purchased from a wetland mitigation bank at a ratio of 1.5:1. Final mitigation requirements for jurisdictional wetlands will be determined during the Section 404 Permit application and review process in consultation with the USCOE. Section 401 Water Quality Certification will also be required from IEPA for the Proposed Projects.
Floodplains	The Lee Street/Northwest Tollway Interchange and Lynxs Cargo Relocation would encroach upon approximately 4.8 acres of floodplain with the new flood control projects in place. In addition, the taxiway bridge to the relocated Lynxs Cargo Facility would impact the Willow Creek floodway.	Compensatory flood storage will be included in the design of the facilities that encroach into the long-term floodplain. The ratio of compensatory to displaced flood storage will be 1.5:1.0. These requirements will be met at the time each encroaching project is developed, and will be based on the size of the affected floodplain. If necessary, prior to the completion of Touhy Avenue Detention Basin and Structure 140, temporary flood storage capacity will be provided for projects that encroach upon the existing floodplain.
Coastal Zone Management and Coastal Barriers	No impacts	None required
Wild and Scenic Rivers	No impacts	None required
Farmland	No impacts	None required
Energy Supply and Natural Resources	No impacts	None required
Light Emissions	No significant impacts	New lighting will be shielded and directed away from residential areas.
Solid Waste and Hazardous Materials	The Proposed Projects would generate demolition and construction debris and general waste during construction and an increase in solid wastes generated by the occupancy and use of the new terminal areas and other facilities.	A Phase I Environmental Site Assessment in accordance with ASTM standards of practice will be performed at each project location to assess the presence of "recognized environmental conditions" associated with past use of the properties. Based on those findings, additional environmental investigations may be required to locate and quantify potential subsurface contamination. If required, appropriate corrective action procedures would be completed in accordance with all applicable rules and regulations. All solid and hazardous wastes would be disposed of according to applicable Federal, state and local regulations.

**TABLE R-4
PROPOSED MITIGATION/COMMITMENTS**

Environmental Resource	Impact	Proposed Mitigation/Commitments
Construction Impacts	Impacts associated with construction include actual construction, equipment noise, equipment emissions, dust emissions, disruption of surface traffic patterns, and disturbance of water quality.	These impacts would be short-term and would be minimized through the use of BMPs.
Cumulative Impacts	Cumulative impacts to wetlands could total approximately 23.06 acres of jurisdictional and non-jurisdictional wetlands. No significant cumulative impacts of past, present or reasonably foreseeable projects are anticipated. Specific analysis of cumulative impacts associated with the proposed runway development concept – including runway relocation, configuration, design, timing, and use – is premature at the present time and subject to uncertainty.	The City has committed to mitigate cumulative wetland impacts identified in Section 5.12 of the Final EA through either creation/enhancement of wetlands offsite or purchase of mitigation credits.

Cost and Schedule

The World Gateway Program, including its Enabling Projects, has been estimated to cost approximately \$3.8 billion. The cost of the Independent Utility Projects is estimated to be over \$512 million. Most of the project cost would be funded by General Airport Revenue Bonds (GARBs). The rest would be funded by Passenger Facility Charges (PFCs), Airport Entitlement Funds, and Federal discretionary funds. Approximately 77 percent of the funding would be provided by GARBs.

Construction of elements of the World Gateway Program is expected to begin in 2002 and to be completed in phases between 2002 and 2008. The World Gateway Program is anticipated to be fully operational in 2007-2008, with 2007 as the first full year in which the proposed Terminal 6 would begin to come on-line. The Independent Utility Projects would be implemented through the planning horizon of 2012, and would begin to come on-line in 2002, with the majority being completed by the end of 2006. Refer to Section 2.5 of the EA for more information.

7. PUBLIC AND AGENCY INVOLVEMENT

The City of Chicago Department of Aviation conducted several briefings to facilitate early coordination of key issues with the following agencies:

- Federal Aviation Administration (FAA)
- U.S. Environmental Protection Agency (USEPA)
- U.S. Army Corps of Engineers (USCOE)
- Illinois Environmental Protection Agency (IEPA)
- Federal Highway Administration (FHWA) and Illinois Department of Transportation (IDOT)

At the briefings, the Department of Aviation officials explained the Proposed Projects, and accepted comments and questions from the agencies. On October 5, 2000, an Agency Scoping Meeting and a Public Scoping Informational Workshop were held to accept comments and questions from the agencies and to provide the opportunity for the general public to learn about the Proposed Projects and to offer comments. Approximately 60 people attended the agency scoping meeting, and 81 people attended the public scoping informational workshop.

During the months leading to the publication of the Draft Environmental Assessment (Draft EA), City officials consulted with key agencies, including the FAA, USEPA, USCOE, IEPA, IDOT, and FHWA to clarify issues and make presentations on preliminary findings.

A Public Hearing regarding the World Gateway Program Draft EA was conducted on Thursday, December 13, 2001, at the Fountain Blue Banquets, at 2300 South Mannheim Road, Des Plaines, Illinois, from 3:00 p.m. to 8:00 p.m. The purpose of the meeting was to obtain comments from the public concerning the materials contained in the Draft EA. Notices announcing the availability of the Draft EA, public hearing, and opportunity to provide comments were published in local area newspapers including the Chicago Tribune, the Chicago Sun-Times, the Daily Herald, and the Daily Southtown. The Draft EA was also made available at 19 libraries, and 166 copies were distributed. A total of 285 people signed in at the public hearing.

The public comment period for the Draft EA ended at the close of business on Tuesday, January 15, 2002. A transcript of the public hearing, comments received, and responses to comments are included in Appendix R, and Appendix S of the Final Environmental Assessment (Final EA). Major issues raised during the public comment period are discussed in Chapters 8 and 9 of this ROD.

The FAA has provided advice and assistance to the City during the environmental assessment preparation. The FAA has reviewed the EA thoroughly. To facilitate this review, the City and the FAA agreed that independent experts specializing in the environmental review of similar types of projects be retained to assist FAA in its review of the EA and underlying technical analyses.

Finding of No Significant Impact / Record of Decision

These independent experts have submitted written disclosure statements that they have no conflicts of interest that would interfere with their independent judgment in reviewing the EA.

For each of the areas of technical analysis included in the EA, the independent experts and FAA evaluated the modeling methodology, assumptions, data inputs and results. FAA typically only uses such independent experts for preparation of an Environmental Impact Statement, as opposed to review of an EA, however the FAA determined that use of independent experts to assist its review was beneficial (1) because of the high level of technical analysis included in the EA and (2) to ensure the public that the analysis results were technically sound and fair.

8. KEY ENVIRONMENTAL/PLANNING CONSIDERATIONS

The Federal Aviation Administration (FAA) in this chapter reviews several key environmental and planning considerations involved with the Environmental Assessment (EA) for Chicago's World Gateway Program and Other Capital Improvements Projects. *Chapter 9 Other Environmental/Planning Considerations*, which follows this chapter, addresses other environmental and planning issues but does not focus, as this chapter does, on the environmental process itself. The key planning and environmental considerations examined in this chapter include whether there is segmentation of and/or connected actions in the environmental process. Also, is there the need for a cumulative evaluation of past, present and future projects that could affect the environmental resources of the area? Is the World Gateway Program part of a larger plan that includes runways? Whether O'Hare is currently out of runway capacity or will be by 2007, and does O'Hare need new terminals without additional runways? Ultimately, in resolving these issues the FAA must also determine whether there is a need for a comprehensive Environmental Impact Statement (EIS). These considerations were examined throughout the EA preparation and review process and are described chronologically below.

Segmentation and Cumulative Impact Concerns Raised at Scoping and Public Hearing/Comment Period on the Draft EA

As part of the scoping for the EA for the World Gateway Program in October of 2000, segmentation and cumulative impact concerns were raised by several commentors. With the advice and direction of the FAA, these concerns were addressed by the City in the Draft EA in Sections 1.9 and 5.22. Subsequently during the public comment period on the Draft EA in late 2001 and early 2002, several commenting parties, including the Suburban O'Hare Commission (SOC), maintained that the process being used for considering the environmental impact was flawed. The commentors' reiterated that the need exists for a cumulative evaluation of past, present and future projects. Their concern was heightened subsequent to the Mayor and Governor announcing a long-term concept, including runway development, for O'Hare prior to the public hearing on the Draft EA. Commentors' indicated that it was difficult to provide input when the World Gateway Program, including independent utility projects, and the long-term concept were being considered separately. They stated that the World Gateway Program could not be justified without additional runways. Several commentors, including SOC, indicated that they believed the World Gateway Program was being considered in a segmented way, isolated from the rest of the O'Hare expansion plans. Subsequent to the close of the comment period on the Draft EA, the FAA received, on April 30, 2002, comments in the form of a letter from ShawPittman (described below). During the FAA's review of the Final EA for acceptance and in its preparation of this ROD, these issues were again considered and analyzed by the Agency. The Final EA Sections 1.9, 5.22 and Appendix S set forth responses to these issues. Additionally, the FAA addresses these issues again in this ROD under the section Cumulative Impacts in *Chapter 6 Environmental Consequences and Mitigation* as well as in this chapter.

ShawPittman Letter/*Birkett v. City of Chicago* Decision

On April 30, 2002, the law firm of ShawPittman supplemented the prior comments filed by the Suburban O'Hare Commission ("SOC") and enclosed a copy of the decision of the Illinois Appellate Court in *People et rel. Birkett v. City of Chicago*, issued April 19, 2002. The letter suggested that the *Birkett decision* has important implications for the FAA's current NEPA review of the proposed O'Hare International Airport World Gateway Program. The letter asserted that the State court decision strongly suggests that based on a very detailed review of the same facts that are before the FAA, the City's Draft EA has illegally segmented the terminal redevelopment project from the planned runway and roadway construction project and would not be needed without it. They proposed, further, that the World Gateway Program is actually a "connected action" to the planned runway project. They urged the FAA to consider the implication of the *Birkett decision* and requested that the Draft EA for the World Gateway Program be disapproved, as it currently exists.

FAA's Response to ShawPittman Letter/*Birkett Decision*

When FAA received the ShawPittman letter and the *Birkett decision*, it viewed these assertions seriously. Documents were referenced that were not before the Agency. In order to have full information upon which to make a decision, the FAA asked the City of Chicago to provide FAA with the record upon which the portions of the *Birkett decision* cited by the ShawPittman letter were based. The City promptly complied and provided copies of documents from the *Birkett* record (court record) responsive to the FAA's request. All documents referenced in plaintiff's brief to the Court of Appeals, with the exception of one document identified CBIM4, which is still subject to a Protective Order, were provided. This document is described in plaintiffs' appellate brief at page 15 and was not referenced by the court's opinion. These documents are described in a letter from the City of Chicago to the FAA dated May 29, 2002. The ShawPittman letter is found in Appendix R of the Final EA.

The FAA reviewed the court record in its consideration of the ShawPittman letter. The FAA noted in reviewing these documents that later material (post 1998) regarding the World Gateway Program had not been included in the court record. The FAA, in a letter dated May 22, 2002, asked the City to advise why the court record did not include the EA or material upon which the EA had been based and to provide responses to issues identified in the ShawPittman letter and the *Birkett decision*. The FAA made this request for use in its deliberation in determining how to proceed with the environmental review of the World Gateway Program. The City of Chicago provided its response in a letter dated May 30, 2002. The City's response has been included in Appendix S of the Final EA.

The *Birkett Decision*

The *Birkett* case came before the Illinois Appellate Court on appeal of the trial court's granting of the motion for summary judgment of defendant, the City of Chicago, and the court's denial of plaintiff's motion, *Birkett*, for partial summary judgment and injunction.

The Court citing Illinois case law stated that summary judgment should be entered if the pleadings, depositions, admissions, and affidavits show that there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. A triable issue of fact exists where there is a dispute as to a material fact or where, although the facts are not in dispute, reasonable minds might differ in drawing inferences from those facts.

The court noted that the record includes exhibits that support plaintiffs' claim that the "World Gateway Project" is part of a larger plan that includes the construction of additional runways; the City's advisors concluded that air traffic demand would require additional runways; the City's public relations firm was hired to win support for runway expansion at O'Hare; studies commissioned by the City and airlines have concluded that O'Hare is currently out of runway capacity or will be by 2007 and that O'Hare does not need new terminals without additional runways. Additionally, the court noted that documents support allegations that the City devised a four-part master plan that included new runways but announced only part of that plan, calling it the "World Gateway Project," without disclosing its intention to reconfigure and construct new runways.

The court affirmed the judgment of the circuit court denying *Birkett's* motion for partial summary judgment and injunction and reversed the trial court's decision granting the City summary judgment. The court concluded that the documents presented by plaintiffs create a genuine issue of material fact and remanded the case to the trial court for further proceedings.

FAA Disagrees with ShawPittman's Characterization of the Court Opinion

After reviewing the court record, the ShawPittman letter and the City's response, FAA disagrees with the ShawPittman letter's characterization of the case. FAA's reading of the decision of the Appellate Court does not follow the ShawPittman letter's conclusion that the court found the World Gateway Program was "segmented" from the runway development concepts or that "...the proposed terminal project has no independent justification and would not proceed without runway construction." The Appellate Court made its decision without a full evidentiary hearing having been held and without evidence on this issue having been submitted by the City. The court's decision appears to be based purely on whether the documents that were submitted by plaintiffs created a genuine issue of material fact. Since the issues before the court dealt with procedural issues, the City did not submit documents at that stage of the litigation that demonstrated the independence of the Proposed Projects, including the World Gateway Program. The FAA agrees with the City's assertion in its May 30, 2002 letter, that what the court found with regard to the alleged segmentation regarding the World Gateway Program was that there was material evidence supporting the plaintiffs' claims. The decision left the determination of whether any segmentation exists under State law to be made after an evidentiary hearing in State court.

EA Materials FAA Reviewed Were Not Part of the Court Record

In FAA's review of the court record provided by the City it was found that the record did not include the documents that were part of the environmental process for the World Gateway Program and other Capital Improvement Projects and which were before the FAA in its review of the EA. Nearly all of the documents before the court were pre 1999. The documents and record, upon which the appellate court relied, were supplied by the plaintiffs in the *Birkett* matter. Documents reviewed by the FAA as part of the EA had undergone significant refinement in subsequent years after tenant negotiations, airspace revisions and further modeling. FAA finds that both the EA and its supporting documents demonstrate the independence of the Proposed Projects from the long-term concept including runway development. The FAA also finds that they have independent utility and that the criteria for "connected" actions has not been met. Thus, the FAA believes the Court did not base its determination on materials which were before the FAA.

World Gateway Terminals Not Connected Actions with Long-Term Concept

The FAA finds that the EA and its supporting documents demonstrate the independence of the World Gateway Program from the long-term concept and that the criteria for "connected" actions as defined in CEQ regulations have not been met. Connected actions are actions that are closely related and therefore should be discussed in the same impact review document. According to the Council on Environmental Quality regulations, actions are connected if they (1) automatically trigger other actions that may require environmental impact statements; (2) cannot or will not proceed unless other actions are taken previously or simultaneously, or (3) are interdependent parts of a larger action and depend on the larger actions for their justifications (40 C.F.R. § 1508.25 (a)(1)). The ShawPittman letter notes that the City hired a public relations firm to win support for runway expansion at O'Hare. Whether or not the City engaged a public relations firm to "win" support for possible runway projects does not provide any additional information regarding whether the World Gateway Program and other Capital Improvement Projects evaluated in this EA, would be connected actions to Chicago's long-term concept. Use of a public relations firm to increase support for possible runway development does not make the Proposed Projects assessed in this EA any more likely to trigger runway development, more likely to proceed without additional runway construction, or dependent on runway or other projects for their justification.

Independent Justification for the World Gateway Program

Based upon its review of the Appellate Court's opinion and documents provided to the court, as well as the EA and its supporting documentation, the FAA has determined that the World Gateway Program is not a connected action and that it has independent justification from the long-term concept, including runway development. FAA finds, as discussed in Sections 1.9 and 5.22 of the Final EA, the Proposed Projects are independent of the long-term concept for O'Hare. The World Gateway Program is intended to improve the efficiency and service for passengers and aircraft that can be

accommodated with the existing airfield. It does not encompass development of terminal facilities beyond those that could be used with the existing airfield and does not depend on any runway changes to make full use of the proposed terminal changes.

As discussed in Sections 1.9 and 5.22 of the EA and Responses to Comment A-4 and A-15, neither the Proposed Projects nor the long-term concept, including runway development, are dependent on the other to proceed. Each set of potential projects has independent utility and neither would automatically trigger the other. The purpose and need for the Proposed Projects are evaluated in detail in Chapter 2 of the EA and are not dependent on the development of any new or reconfigured runways. The EA gives as an example the need to improve connections between arriving international passengers (now limited to Terminal 5) and domestic departures in other terminals is completely independent of whether any additional or reconfigured runways are built at O'Hare. The World Gateway Program was designed to meet the needs of activity the existing airfield could and would handle through 2012.

The FAA concurs with the EA's assessment that the World Gateway Program terminals are not being built with excess capacity beyond what could and would be capable of being used with the existing airfield. See Response to Comment A-15. To put the World Gateway Program improvements into perspective, enplanements are forecast to increase by 26.3 percent between 2000 and 2012 (with or without the Proposed Projects), while operations are forecast to increase by 8.1 percent (with or without the Proposed Projects). Under the World Gateway Program the proposed gate frontage would increase by 8 percent and the total number of gates by 7 percent. If peak activity increases beyond the level of activity forecast for 2012, additional terminal development beyond the World Gateway Program would be required to preserve the same level of service and efficiency. Because the World Gateway Program terminals are not being built with excess capacity, approval of the Proposed Projects would in no way influence future decisions regarding the development of additional runway capacity at O'Hare or elsewhere.

EA Materials Reflect Changed Circumstances From Those Found in the Court Record

The City's letter of May 30, 2002, goes into detail regarding what the court found with regard to State law. However, what FAA considers important is that the court record did not include the EA for the Proposed Projects that is before FAA for its determination. Nor did the court record include the basis upon which the EA was formulated, including the World Gateway Program simulation analyses, purpose and need assessments and related information. Thus, the FAA believes that the court did not make its determinations based on the latest information available.

The EA's analysis of airfield operations is based on new and more current assessments of O'Hare's ability to accommodate demand than those used by City consultants in the court records cited by the plaintiff. The updated analyses are extensively documented in Chapter 1, Chapter 2 and Appendix H of the EA. While the EA and its analyses do not seek to identify the ultimate practical capacity of the Airport,

they do indicate that the Airport could handle forecast levels of operations through 2012 based on assumptions regarding procedures, aircraft and other critical factors developed subsequent to those in the court record. See Appendix H of the EA. FAA, in its recent EIS for Chicago Terminal Airspace Project (CTAP), determined that the Airport could handle 1.08 million operations, well more than the EA's forecast of operations through 2012. Thus, O'Hare is neither currently out of runway capacity nor would be by 2007. The EA's predicted operations level for 2012 is only four percent higher than the 946,000 operations scenario referenced in the documents provided to the court. This relatively small difference is explained by updated inputs used in the assessment, prediction and simulation of airfield activity.

The 946,000 annual operations value was used in simulation analysis efforts undertaken in 1993 and 1994. This value was the highest level of operations analyzed in that particular effort for the existing airfield. However, it was not intended to represent the maximum level of possible capacity of the existing airfield. See Responses to Comments D-19 and D-31 of the Final EA for a discussion of some of the factors affecting capacity.

The FAA's review of the court record, also disclosed that it includes documents from the early 1990s prepared by various consultants to the City. These stated that roadways and runways were the primary constraints on the capacity of the Airport and that the Airport had some excess terminal capacity especially in Terminal 2. The FAA believes that these statements and analyses made almost ten years ago are no longer applicable. Gate utilization at the Airport has increased, especially at Terminal 2; the terminal identified earlier as having surplus capacity. According to City data, since 1993, United Airlines, United Express and their alliance partner Air Canada have greatly increased their utilization of Terminal 2, so that it is no longer serving primarily spoke carrier operations. As a result, Terminal 2 has little surplus. Even if it still had surplus capacity, it would not be able to address the needs identified in Chapter 2 to better accommodate larger size aircraft and international connecting passengers, because the only FIS facilities are located at Terminal 5. As discussed in Chapter 2 of the EA, the increasing average size of aircraft has meant that terminals designed years ago do not always efficiently accommodate the current and anticipated fleet mixes. Thus, even if some underutilized gates existed in Terminal 2, it does not satisfy the need to provide the right size gates when and where airlines need them. Further, as discussed in Appendix H and Chapter 1 of the EA, the airfield has a number of periods at which it operates below capacity, allowing for growth in annual and daily operations.

The analysis in the EA is consistent with the basic approach identified in the early 1990s, but reflects changed circumstances and provides up-to-date information, including an updated assessment of the ability of the airfield to meet forecast operational demand through 2012. The World Gateway Program is designed to provide terminal facilities to better match the operations the airfield would handle through 2012 than the information developed earlier. As a result, the documents referenced by the *Birkett* decision regarding the need for terminals without runways do not change the EA's assessment of the need for the World Gateway Program terminals. The more recent assessment, as contained in the EA and reviewed by the

FAA, is that the need for the World Gateway terminals exists independent of any runway concept planning.

Prior Master Plan Efforts (Four Part Master Plan)

The record before the court includes documents in which City consultants prepared and presented various planning concepts to the City in the 1990s reflecting both runways and terminals, including some of the elements of the Proposed Projects assessed in the EA. The records contain planning documents developed in 1998 by consultants for the City that included concepts for development during four different time periods. The FAA noted in its review of the court records that projects in the 2000-2012 time frame included terminal development elements that were similar to portions of the World Gateway Program. However, projects characterized as "2012+" included reconfigured runways and additional terminals in the western portion of the Airport. At the time the City announced its proposal for the World Gateway Program, it did not advance any runway construction proposals. It would be speculation on FAA's part as to the reason why the runways were not included, but during this period others including the airline industry urged the City and various congressmen to consider new runways while numerous local governments and congressmen advocated having locations other than O'Hare considered for runway capacity improvements.

From FAA's review of the court records it is clear that they reflect the fact that City consultants developed some runway and terminal concepts. However, the FAA's review of the court records do not indicate that the Proposed Projects, including the World Gateway Program, depend on any larger plan for their justification nor do the Proposed Projects automatically trigger runway or other development. Finally, the FAA disagrees with the assertion in the ShawPittman letter that the Proposed Projects evaluated in the EA would be kept from proceeding unless runway or other development occurs previously or simultaneously, nor that there would be a need for terminals without new runways. Indeed, documents in the court record separate projects that were intended to address pre-2012 and post-2012 issues. Terminal development in the locations of the proposed Terminal 4 and Terminal 6 was included in the pre-2012 category. Likewise, additional terminals in the western portion of the Airport were included in the post-2012 concept projects. The FAA notes that the analysis in the EA indicates that terminal capacity beyond the World Gateway Program terminals was contemplated as being paired with airfield reconfiguration, while the World Gateway Program terminals would be developed without prior or concurrent runway development. This phasing appears to be consistent with the Mayor's current proposed concept that includes western terminals beyond the World Gateway Program in conjunction with runway reconfiguration.

In contrast, the World Gateway Program terminal projects were designed to efficiently accommodate the needs of activity that the current airfield could and would handle through 2012. The court records do not demonstrate that the World Gateway Program projects were dependent on long-term runway development for their justification or vice versa. The fact that consultants showed a range of potential development options that would cover different needs and periods of time does not mean that projects included

among the options depend upon the implementation of the entire package of options for their justification. There is no requirement that an airport or federal agency address every potential need at an airport over different time periods to justify moving ahead with a project that addresses independent needs. Certain projects become ripe for development based on interest of tenants (changes in aircraft equipment or establishment of alliances), policy changes (relaxing of HDR, international treaties opening new routes and destinations), financing possibilities (changes in national and local funding priorities), availability of technological advances or procedures (land and hold short procedures) and competition from other airports both locally and nationally.

In addition, the fact that consultants prepared long-range conceptual planning documents does not mean that the contents were requested, approved or adopted by the City. The documents reflect long-range planning concepts that were displayed together in a set of maps and not an overall plan proposed or accepted by the City. It is the role of long-range planners to develop such concepts for the benefit of decision makers to better understand long-range development options and limitations at a critical transportation facility. This does not make such concepts either City proposals or reasonably foreseeable projects.

Cumulative Impact Issues Raised

In the comments provided by the public on the Draft EA, one commentor expressed the belief that he expected the cumulative impacts will be positive to the surrounding community. More common was the belief expressed by several commentors who pointed out that the O'Hare World Gateway Program is not the only project that affects people around O'Hare. The combined impact with other projects is more severe than the single impact. They questioned what are the overall cumulative impacts of the proposed action and the consequences of subsequent related actions? The negative comments by some commenting parties seem to ignore the comprehensive cumulative impact evaluations in Section 5.22 of the EA and in their specific resource categories in Chapter 5 of the EA. However, the commentors apparently assumed that the World Gateway Program EA was the environmental document assessing the long-term concept announced by Mayor Daley in the summer of 2001. As discussed in Section 1.9 of the EA, it should be noted that the Proposed Projects evaluated in the EA are independent of the long-term concept and are not connected actions that require a single environmental review under NEPA. As noted in Section 5.22 of the EA, the long-term concept has not yet been prepared in sufficient detail to be ready for a thorough environmental review. It is subject to uncertainties and is not known with sufficient specificity to be capable of environmental review. Specific analysis of impacts associated with runway relocation, configuration, design, timing, and use is premature at the present time. In the absence of specific information about these parameters, detailed environmental analysis would be highly speculative. Because the long-term concept including runway development will require an EIS by FAA that will include a full cumulative review of past, then present, and future impacts including the Proposed Projects, NEPA concerns about segmentation or cumulative impacts are not implicated by the review of the World Gateway Program in this EA. These Proposed Projects are not being reviewed separately to obscure significant impacts and avoid the

ultimate need for an EIS. When the plan is developed, it will be subject to an EIS in accordance with the National Environmental Policy Act and FAA Orders 1050.1D and 5050.4A and any other applicable requirements. That EIS must consider the cumulative impacts of the long-term concept including runway development in combination with other projects, including the World Gateway Program.

World Gateway Program's Cumulative Effects Evaluation

Several commenting parties have made positive comments regarding the cumulative analysis found in the EA. The USEPA, which has significant experience in the area of cumulative impact, commended the FAA and the City for their efforts in compiling a comprehensive study. They expressed the belief that the intent of environmental disclosure was facilitated by the approach that was used to address cumulative impacts. They noted that the cumulative impact analysis in the Draft EA captured past, present, and reasonably foreseeable aviation as well as non-aviation projects that would affect important resources in the area. However, the USEPA suggested that the EA could be improved by the addition of a plain language, comprehensive evaluation of the cumulative impacts of past, present, and future aviation projects impacting the World Gateway Program timeline. In response to USEPA's request, Section 5.22 of the Draft EA, which contained an overview of cumulative impact issues, was modified in the Final EA to include a plain language, comprehensive evaluation of the cumulative impacts assessed throughout Chapter 5 in their respective resource categories. These sections found that the cumulative impacts of the Proposed Projects were not significant, even in light of other past, ongoing or reasonably foreseeable projects.

An EIS is Not Needed for the Proposed Projects, Including the World Gateway Program

FAA finds that as a matter of NEPA's intent and good public policy, it is fully reasonable to assess, at the present time, the effects of the independent Proposed Projects, including the World Gateway Program, as evaluated in the EA. The Proposed Projects would proceed with or without the long-term concept, do not affect the likelihood of possible runway changes and would not affect any options for the long-term. Otherwise, essentially all focused and necessary infrastructure improvements would have to wait years while long-term conceptual planning is finalized, even if they would not have any direct or cumulative significant impacts. Based on the analysis set forth above, contained elsewhere in this ROD and the Final EA, the FAA finds that NEPA policy concerns about segmentation or cumulative impacts are not implicated in this EA. These Proposed Projects are not being reviewed separately to obscure significant impacts or avoid the ultimate need for an EIS.

Further, taken as a whole, the EA and its supporting documentation, including the documents before the *Birkett* court, have been reviewed by the FAA and do not demonstrate that the World Gateway Program and the long-term concept including runway development are "connected actions." Moreover, FAA has reviewed the EA and finds that it includes a discussion and disclosure of the cumulative effects of

Finding of No Significant Impact / Record of Decision

appropriate past, present and future aviation and non-aviation projects that would or could affect important resources in the area. (However, inclusion of other cumulative impact projects in this EA does not mean that they are imminent, feasible or “connected” but that the City, other governmental bodies, or private interests are considering them.)

In conclusion, the FAA finds that preparation of this EA fully evaluates potential impacts associated with the Proposed Projects and complies with the requirements of the National Environmental Policy Act and implementing regulations and orders. FAA has determined based upon the Final EA, its supporting documentation, comments, including the ShawPittman letter, responses and the court record that there is no need to prepare an EIS. FAA has found no significant impacts associated with the Proposed Projects or cumulative development that would require preparation of an Environmental Impact Statement.

9. OTHER ENVIRONMENTAL/PLANNING CONSIDERATIONS

A number of commenting parties raised concerns regarding the Proposed Projects during the 67-day period following the issuance of the Draft Environmental Assessment (Draft EA) on November 8, 2001. One supplemental comment letter was subsequently submitted on April 30, 2002. Response to this letter's comments can be found in Chapter 8 of this ROD. The majority of the comments received on the Draft EA were in the areas of segmentation/need for an EIS, forecasts, cumulative impacts, wetlands, quality of life/health effects, air quality, environmental justice, benefit cost analysis, funding implications, Freedom of Information Act (FOIA) requests, and other airports / a new airport as alternatives. No substantive comments were received on the following topics: light emissions; solid waste; historic properties, coastal zone management and coastal barriers and scenic rivers.

The FAA has carefully assessed and considered the comment letters and the public hearing testimony received on the Draft EA in making its decision. Appendix R of the Final EA provides copies of each letter received, and includes testimony received in a public hearing on December 13, 2001. Detailed responses to the comments raised by commenting agencies, citizen groups and individuals are included in Appendix S of the Final EA. The key environmental/planning issues raised in the Draft EA are in the areas of segmentation, cumulative impacts and need for an EIS. These are summarized and discussed in Chapter 8 of this ROD. Other more general environmental/planning issues are summarized and discussed below. Responses to other specific issues brought up by commenting parties are found in the response to comments in Appendix S of the Final EA. Finally, comments and responses for those individuals associated with regulatory agencies and those representing various local governments/community organizations are compiled in Appendix A of this ROD. A summary of significant comments is set forth below in bold and responses are made in regular text.

FORECASTS ARE UNDER / OVER ESTIMATED

Several commenting parties had conflicting assertions regarding the forecasts. Some did not believe that the forecasts took into account the events of September 11, 2001 and therefore the forecasts overestimate the operations and enplanements that can be expected. This, they believe, may mean that the Proposed Projects, including the World Gateway Program are not needed.

Other commenting parties discounted the long-term effects of the events of September 11, 2001. They allege that the aviation forecasts used in the World Gateway Program are unsupported, inconsistent with other forecasts, and too low. For example, they indicated that they believed that the forecasts by the City substantially understated the demand at O'Hare and Midway in its environmental assessment. They assert that if the demand were corrected to reflect accurately the data with respect to forecasts, it would dramatically alter the cost benefit analysis and environmental impact of the World Gateway proposal. They further

suggest that the forecasts underestimate the amount of operations and enplanements and thus underestimate the need for a new supplemental airport for Chicago. They also request that the EA explain why the FAA's terminal area forecast for O'Hare projects so much lower a growth rate than FAA does for the nation as a whole. The Commentors assert use of regression analysis based on past demand data for O'Hare does not create an unconstrained forecast because the Airport has been already capacity constrained. Several commentors also expressed their concern that the forecasts do not take into account the future capacity when the new runways are built.

One commenting party pointed out that FAA has provided a wide variety of forecasts for O'Hare over the last several years. They question why the Draft EA fails to disclose these varying FAA forecasts and does not discuss the reasons for their differences.

First, as to the forecasts being overestimated based on recent events, FAA acknowledges that airport activity has declined at O'Hare and nationwide since the terrorist attacks on September 11, 2001. FAA anticipates that, for the short term, economic conditions and security concerns will result in continued enplanement and operations levels that are lower than comparable activity prior to September 11, 2001. However, there is no convincing information at this time to suggest that long-term (2007 or 2012) population or income expectations would decline such that long-term passenger demand for air travel will be affected or that other long-term assumptions utilized for the forecast are unreasonable. Some travelers have shifted to other modes of travel or communication, but there is no compelling evidence that there will be a significant long-term shift. Activity has increased each month since the September terrorist attacks, reflecting a trend toward normalcy. In fact, in March 2002 United Airlines announced a large increase in daily flights out of O'Hare. The City's forecast, like other long-range forecasts, assumes that there will be periods of declines and rapid growth during the course of the general trend that forecasts can provide.

Even if the current economic and security conditions do affect long-term growth in air travel, they would likely only delay meeting the forecasted levels of operations and enplanements for months or a few years. Such a situation would not affect the purpose and need for the Proposed Projects. As discussed in Chapter 2, Purpose and Need of the Final EA, the World Gateway Program is needed based on existing levels of activity and will become more beneficial as enplanement and operations levels grow. Similarly, slower rates of growth would lead to the over prediction—rather than under-predictions—of environmental impacts associated with Airport activity.

As to the comments that the City's forecast underestimates the demand, FAA has found that there is always some uncertainty inherent in prediction of future events. However, the forecasts used in the EA represent the best detailed prediction of activity through the year 2012, based on coordination with the airlines, available demographic and economic data and proven methodologies for predicting demand. It would be speculative to assess other potential scenarios such as for the long-term concept that are not based on these reasonable forecast approaches.

The EA uses a forecast prepared by the City of Chicago. The demand projection methodology, discussed in Section 1.7 and Appendix E of the EA, is based on observed empirical relationships in the Chicago market, interviews with airlines using O'Hare and FAA officials, and information specific to the airlines using O'Hare. It represents the level of activity reasonably expected to occur based on available information. FAA has approved the use of this forecast for environmental assessment of the World Gateway Program, and it is within 10 percent of FAA's most recent Terminal Area Forecast (the 2001 TAF), released in January 2002. Pursuant to FAA Order 5100.38A, forecasts generated by airport proprietors may be used for planning and other purposes if they are within 10 percent of the most recent TAF, because long-term forecasts within this range are considered essentially equivalent for planning and review purposes.

The EA relies upon a reasonable forecast of activity through the 2012 project horizon. As discussed in Section 1.7 and Appendix E of the EA, the detailed forecast developed by the City is within 10 percent of the current FAA 2001 Terminal Area Forecast (TAF) for O'Hare, and FAA has accepted it for use in this EA and in planning for the World Gateway Program. Appendix E of the EA details the support for the methodology and data used for the forecasts.

Several commenting parties also asked for an explanation why FAA's forecasts for O'Hare are so much lower than the national forecasts. Both the City and FAA forecast rate of growth for the Chicago metropolitan area differ from national forecasts of growth in aviation activity, including FAA forecasts, because future activity at individual airports such as O'Hare will be dependent on local economic, demographic, industry and other trends. Because national growth trends aggregate activity across the country, some airports will have higher rates and others will have lower rates of growth.

Relative to other parts of the United States, Chicago is predicted to experience a more moderate level of population and income growth through 2012. Further, O'Hare has one of the most mature aviation markets in the country. Frequent service is available to almost all domestic and many international markets of significance at fares near market averages. Thus, there are fewer opportunities for growth into new markets of significance at fares near market averages. Furthermore, there are fewer opportunities for growth into new markets than at many other American airports.

At the same time, as other markets mature, there will be more opportunities for direct service between markets that do not have to be connected through a hub such as O'Hare. For example, transcontinental flights between cities such as San Diego or Seattle and Boston or Washington are expected to become economically viable. These trends are expected to contribute to rates of growth at O'Hare that are lower than the national average. This lower rate of growth is not a function of a failure or inability to capitalize on opportunities for growth. Instead, it is a reflection of the fact that O'Hare has already attained an unparalleled level of destinations and frequencies of service. Few significant domestic markets to or from O'Hare are untapped. As a result, O'Hare will show a lower level of average annual growth than national averages.

Finally, the question was asked why the FAA has had varying forecasts over the past few years and whether there should be a discussion in the EA regarding these variations. Such a discussion of FAA's forecasts other than the current TAF is unnecessary for the purposes of this EA. FAA updates its TAF for O'Hare and other airports every year on the basis of updated input data regarding population, industry trends, economic conditions and other relevant considerations. It also makes changes, as appropriate, to its forecast methodologies to improve the forecast approach. Section 1.7.2.2 of the EA identifies some of the factors that led FAA to adjust its most recent forecast of activity for O'Hare.

QUALITY OF LIFE (See also AIR QUALITY, PARTICULARILY AIR TOXICS)

A number of commenting parties complained about the quality of life in the area around O'Hare that they say is adversely affected by the operation of the Airport. First, they expressed their fears regarding the existing situation; then they noted their anxiety regarding the proposed implementation of the Proposed Projects, including the World Gateway Program; and finally they expressed deep concern about the cumulative impacts of various projects affecting the area, including the implementation of the proposed runway concept plan. These three issues are described and discussed in more detail below:

First, various commenting parties expressed their fears about the existing situation in the area around O'Hare. Primarily they appear to be concerned about human health effects off-airport that they believe are attributable to the Airport's existing environmental effects off the Airport's property. One Commentor alleges that O'Hare is currently an out of control, virtually unregulated menace to the public health, safety, welfare, and our environment, our quality of life, and our children's health and well-being. Others state that existing aircraft emissions and the resulting support and arterial ground traffic, pose many serious threats to human health and the environment. They further assert that air toxic emissions from aircraft are creating a severe local impact and that disease rates are reportedly higher the closer one lives to the airport. They state that O'Hare and its aircraft also infringe on civil rights, privacy, and liberty. Some commentors report that currently there are large number of planes flying over their houses, and ask how can anyone expect people to put up with that kind of nuisance. The bottom line, the commentors assert is that the City's EA is inadequate because it has not performed adequate baseline health assessments and disclosures as to the components of an evaluation of health and environmental impacts. Several of the commenting parties requested the City identify and determine how the most sensitive of the population will be affected by the hazardous and toxic pollutants created by O'Hare Airport and aircraft operations. They further requested that an appropriate, realistic, current baseline study be done in the EA, as it is needed to compare the existing situation to future projects.

The various commenting parties fail to substantiate claims that current activities at O'Hare are unregulated or a threat to public health and the environment. As discussed

in Chapters 4 and 5 of the EA, the Airport is subject to numerous environmental and safety regulations that protect the environment and public health. As to the need to provide a comprehensive environmental baseline study, FAA has determined that a full public health or safety study of existing conditions, particularly the potential impact of air toxics, is beyond the scope of this EA and is not needed to understand the effects of the Proposed Projects. Under the National Environmental Policy Act, the City is only required to characterize the affected environment to the extent necessary to understand the impacts of the Proposed Projects. To carry out this responsibility, the City followed the requirements set forth by FAA Order 1050.1D and FAA Order 5050.4A. The EA in Chapters 4 and 5 adequately evaluates the effects of current operations on the environment and public health.

Various commenting parties expressed their anxiety about the potential impact of the Proposed Projects including the World Gateway Program. They believe that the World Gateway Program will degrade the environment, worker health and quality of life in nearby communities. They insist that FAA and/or the City of Chicago should not allow such degradation, but should protect their health and quality of life. Various commentators allege that the Proposed Projects will result in more planes, flights and cars that will lead to more air pollution. If the World Gateway Program proceeds, they feel pollution will be unbearable. What the people need, they assert, is a guarantee that the World Gateway Program, in combination with any addition of slots on the ground, or more flights, or larger aircraft, etc. will not cause further deterioration to health already impacted by O'Hare airport operations. They requested that assurance be given that the World Gateway Program will deliver on the promise to improve the quality of life for residents.

As discussed in Section 1.7 of the EA, the existing airfield and terminal infrastructure can accommodate forecast aircraft operations through 2012. Accordingly, the implementation of the World Gateway Program would not increase the number of aircraft operations. Thus, the same number of operations is projected with or without the World Gateway Program, but the Proposed Projects will reduce aircraft delays on the ground. The Proposed Projects will lead to an increase in the number of automobile trips to and from the airport, but the proposed road improvements will improve traffic flow. The net result will be a reduction in the emission of pollutants. Refer to Table 5.6.1 Emissions Inventory Summary in the EA, which demonstrates the decrease in the quantities of emissions, for every criteria pollutant, with the implementation of the World Gateway Program.

Based on the analysis presented in the EA, the World Gateway Program will not create significant adverse impacts in any environmental resource categories or factors relating to quality of life considered under the National Environmental Policy Act (NEPA), or as required in FAA Orders 1050.1D and 5050.4A implementing NEPA. In fact, as mentioned earlier, the Proposed Projects would result in slight reductions in noise, improvements in air quality, and reduction in road traffic congestion.

Similarly, there is no basis for concluding that the World Gateway Program would adversely affect worker health. Emissions of air pollutants would decrease with the implementation of the Proposed Projects. See Section 5.6 of the EA. Noise levels and hazardous materials uses in occupational settings would not be affected. The Proposed Projects would not affect compliance with occupational health and safety requirements designed to ensure worker safety and health.

On the other hand, as discussed in Chapter 2 of the EA, many of the benefits of the Proposed Projects will directly benefit local businesses and users of the Airport. Indirectly, as assessed in Section 5.5 of the EA, the Proposed Projects would create economic activity and efficiencies that will benefit the entire local economy. At the same time, as disclosed in Chapter 5 of the EA, the Proposed Projects would not cause significant impacts for any resource category in communities surrounding the Airport. In the design of the Proposed Projects, including the World Gateway Program, the City of Chicago has been sensitive to the environmental concerns of neighboring communities. Indeed, the Proposed Projects would actually lead to environmental improvements in some categories, including air quality and noise. The Proposed Projects – especially the World Gateway Program — would reduce overall air quality emissions as compared to the No Action alternative and reduce the number of nighttime flights that create noise during the period of greatest sensitivity.

In summary, the EA meets NEPA requirements and those set forth by FAA Order 1050.1D and FAA Order 5050.4A to disclose potential adverse impacts of the proposed project on multiple categories of environmental concern. The analysis contained in the EA revealed that the Proposed Projects, including the World Gateway Program, would cause no significant adverse impacts.

Finally, several commenting parties expressed deep concern about the proposed runway concept plan and the cumulative impact of the various projects affecting the area, including CTAP, World Gateway Program, the long term runway concept plan, elimination of the High Density Rule, redevelopment of I-190 and other reasonably foreseeable projects. They believe that the EA fails to disclose the many adverse effects of the adverse public health and environmental impacts from CTAP, World Gateway, the planned runway redesign and other related projects. They point to particularly the noise analysis proposed as a part of the runway concept plan that they believe shows noise is going to increase in some areas by 2,500 percent. They assert that pollution is likely to increase by that much too, if not more. They also argue that doubling the number of flights is not going to make their life better.

Some of the concerns relating to cumulative impacts are discussed in Chapter 8 of this ROD. CTAP, a high altitude airspace and air traffic control program, would not interact with the Proposed Projects to create any cumulative adverse impacts. Many of the other comments appear to be intended to address the long-term concept announced by Mayor Daley in the summer of 2001. As discussed in Section 1.9 of the EA, the Proposed Projects are independent of the long-term concept. Further, the long-term concept has not yet been prepared with sufficient detail to be ready for a thorough

environmental review. When the plan is developed, it will be subject to an EIS in accordance with the National Environmental Policy Act and FAA Order 1050.1D and 5050.4A. That process will involve further opportunities for public review and comment.

ISSUES REGARDING REQUESTS FOR INFORMATION, PARTICULARLY REQUESTS UNDER FEDERAL OR ILLINOIS FREEDOM OF INFORMATION ACTS (FOIA)

Several of the commenting parties allege that the public has been denied details such as benefits, costs, financing, and impacts of the World Gateway Program. They further assert that Chicago has failed to make available documents and calculations underlying its capacity analysis. As a result, the process has not been a respectful and open dialogue regarding air capacity needs. They also assert that Chicago has been unwilling to address the needs of the whole region. The commentors express concern that they must know the details regarding the runway plan in order to comment on the World Gateway Program. They allege these details have been withheld in violation of Illinois and Federal Freedom of Information Acts. Specifically, they assert these documents have been withheld in violation of the record disclosure requirements of the Federal environmental laws. Finally, they indicate that they have been forced to file a lawsuit under the Freedom of Information Act to obtain details.

First, the Proposed Projects, including the World Gateway Program discussed in this EA, are not designed to address long-term aviation capacity issues. Instead, as discussed in Chapter 2 and Section 1.7 of the EA, the Proposed Projects are intended to better serve the passengers and operations that would use the Airport through 2012. The Proposed Projects are independent of efforts to evaluate the long-term concept for O'Hare and the South Suburban Airport. See Section 1.9 of the EA. Further, as discussed in Section 1.9 and 5.22 of the EA, planning efforts for the long-term concept are only beginning now. The long-term concept is still subject to much uncertainty and has not been designed or planned in detail. Section 1.9 of the EA contains the available information regarding the outlines of the long-term concept. No lawsuits have been filed against the City or FAA under the Freedom of Information Act (FOIA) regarding information about the long-term concept.

The EA provides information throughout regarding the benefits, costs, financing and impacts of the Proposed Projects, including the World Gateway Program. Chapter 2 of the EA provides information regarding the purpose and need, benefits, costs and financing of the Proposed Projects, including the World Gateway Program. Chapter 5 and the Appendices of the EA provide detailed information regarding the impacts of the Proposed Projects, including the World Gateway Program. Voluminous computer or data files, as well as documents relied upon in the preparation of the EA or cited in the document, are public documents that the City and FAA have had available for the public since the release of the Draft EA on November 8, 2001. No informal or Freedom of Information Act requests were received by the City or FAA to review these documents. Only one of the commentors has submitted a recent FOIA request and

that request was received prior to the release of the Draft EA on November 8, 2001. It was related to the City's long-term concept proposal to the State of Illinois. That request did not mention the World Gateway Program. In addition, no lawsuits have been filed against the City of Chicago or the FAA regarding any requests for information on the Proposed Projects, including the World Gateway Program, under the state or Federal Freedom of Information Act.

The SIMMOD analyses and other modeling work done to support the Draft and Final EA are public documents that were referenced extensively in the Draft EA. Appendix H details the critical input assumptions, methodologies and sources for the SIMMOD modeling. Both the City and FAA have had this information available since the release of the Draft EA. SIMMOD is a publicly available model developed by FAA. Neither the City nor FAA received any requests during the public comment period for this detailed information regarding the World Gateway Program analysis of capacity or simulation efforts. Further, the appendices in the EA include considerable information regarding the inputs and outputs of these models. The commentor did not address any of this detailed information.

RAIL/HIGH SPEED RAIL SHOULD BE CONSIDERED AN ALTERNATIVE

Several commenting parties, including some representing the Midwest High Speed Rail Coalition, the National Association of Railroad Passengers and the Illinois Rail and Chicagoland Transportation Air Quality Commission, stated that existing rail offers numerous opportunities at Chicago O'Hare International Airport for expanding passenger service to reach many more areas. To do this, rail transfer alternatives need to be coordinated with the O'Hare expansion so a high-speed train network could be linked to O'Hare. It is believed that such a system would be better at connecting people from the Midwest with O'Hare. This could relieve traffic pressure for short distance flights and free slots for long-range flights. Several commentors stated that they believe around 50% of commercial aircraft flights nationwide and at O'Hare are for trips of 500 miles or less and thus many flights on short routes could be better served by rail. One commentor representing Alliance of Residents Concerning O'Hare/US-Citizens Aviation Watch Association went on to suggest that the City's conclusatory dismissal of building regional and nationwide high speed rail systems as viable alternatives to adding capacity at O'Hare is groundless and based on circular reasoning. The commentor suggested that a regional high speed rail system is the perfect alternative to infinitely increasing the number of planes flying overhead. Finally, another commenting party questioned why transportation assets go to highway and air travel, not rail travel. Equal treatment would provide better service.

Chapter 3 of the EA evaluates the potential for high speed and conventional rail as an alternative to the Proposed Projects, including the World Gateway Program. It finds that upgraded rail service would not meet the purpose and need for the World Gateway Program. Further, in response to several commentors' assertions that half of the

commercial aircraft flights at O'Hare are located within a relatively short 500-mile radius; FAA does not find a basis for this assertion. As discussed in Chapter 3 of the EA, almost all of the top 20 routes using O'Hare are to destinations farther than 500 miles. Most passengers on commercial aircraft at O'Hare do not arrive from or depart to destinations within 500 miles as asserted by the commenting parties, so improved rail service is unlikely to significantly reduce the number of air passengers using O'Hare. Therefore, conventional and high-speed rail are not reasonable alternatives to the World Gateway Program. The purpose and needs identified in Chapter 2 of the EA already exist and will grow through the forecast period. Rail service would not provide improved gate availability and efficiency in the terminal area at O'Hare, improved connecting passenger convenience at O'Hare, or improved local passenger convenience at O'Hare (refer to Chapter 2 of the EA, Purpose and Need). Further, it is unlikely that a high-speed rail system could or would be built within the planning period for the World Gateway Program. Even if improved rail service could divert some flights or passengers, it would not reduce the needs identified in Chapter 2 of the EA for the passengers and flights that would continue to use the Airport. As discussed in Chapter 3 of the EA, passengers will still need to connect between domestic and other domestic or international flights. Finally, larger gates will still be necessary to more efficiently accommodate the larger aircraft that tend to fly the longer routes that high speed rail would not effect.

Implementation of high-speed rail infrastructure is beyond the purpose and needs of the Proposed Projects identified in Chapter 2 of the EA. Further, the allocation of national transportation assets between transportation modes is subject to congressional appropriation and decisions by other modal agencies of the Department of Transportation, and as such is beyond the jurisdiction of FAA and the City of Chicago Department of Aviation. Therefore, high-speed rail is not a viable alternative to the World Gateway Program.

Several commentors also proposed that improvement of regional and local rail and transit service should be considered in the EA to get more riders to access the airport by train rather than by cars to reduce surface traffic. Additional Metra lines would attract more riders with a convenient transfer to airport transit system or tram to terminals. The infrastructure could also support express trains to downtown and remote parking lots that would reduce traffic. One commentor has proposed a design for an intermodal connection with ATS, that he labels "Terminal 7".

Improvement of regional and local rail and transit service and infrastructure within the scope of the project have been included within the EA. Others are outside the scope of the Proposed Projects identified in Chapter 2 of the EA, and the jurisdiction of the FAA and the City of Chicago Department of Aviation. The City of Chicago supports and encourages convenient intermodal connections between the Airport and rail service. The Chicago Transit Authority Blue Line and Metra Commuter Rail connect O'Hare with downtown Chicago, northwest Chicago, and other northwest suburbs. The proposed extension of the ATS system and new ATS station in Lot F, evaluated in the EA, would allow for improved connections between Metra and the terminal areas at the

Airport, replacing the need for a shuttle bus between the Metra station and current ATS terminus. The ATS connection and station would be consistent with and support potential future high-speed or conventional rail service extension to O'Hare. The ATS would provide convenient access to each of the Airport terminals. The commentor's proposed "Terminal 7" shows a potential station linking an extended Chicago Transit Authority (CTA) Blue Line, the extended ATS, Metra, local and regional buses and potential high-speed rail. Extension of the Blue Line, rearrangement of bus service and development of high-speed rail are beyond the scope of the Proposed Projects, as identified in Chapter 2 of the EA. The proposed "Terminal 7" is more extensive than required to address the need to provide a connection between Metra, Lot F and the ATS system. A CTA Blue Line stop in the Central Terminal Area already provides excellent access to the CTA. Also, regional bus lines service the Central Terminal Area. Nonetheless, the ATS station in Lot F proposed in the EA is very close to the commentor's proposed location and would be compatible with rail improvements that might occur in the future.

OTHER AIRPORTS AND / OR A NEW AIRPORT SHOULD BE CONSIDERED AS ALTERNATIVES

A number of commentors including some representing the Suburban O'Hare Commission and Alliance of Residents Concerning O'Hare/US-Citizens Aviation Watch Association had suggestions for alternatives to the World Gateway Program that entailed using other airports and or building a new South Suburban Airport at Peotone. First, they suggested that another airport would provide jobs, a back-up airport and help the economy more than the World Gateway Program. They also believed that transferring some of the flights to an airport south of O'Hare would better disperse air pollution. Finally, they assert that many of these flights could be re-routed to wayports and/or Mid America, Atlanta, Denver and other airports, totally negating any "need" to increase O'Hare's capacity, as CTAP, World Gateway, the planned runway redesign and other related projects are alleged to do. They feel that given the enormous cost of WGP, a new airport might relieve a significant amount of congestion. One commentor even recommended that some of the infrastructure at O'Hare be removed and replacement infrastructure be built elsewhere.

As discussed in Chapter 3 of the EA, construction of a new airport or use of existing airports beyond levels already forecast would not address the purposes and needs for the Proposed Projects. It would not address the needs of passengers and flights that would still use O'Hare. As discussed in Chapter 2 of the EA, the need for improvements in the terminal area exists today and would not be eliminated through additional capacity elsewhere. The purpose and need for the Proposed Projects are not tied simply to finding projects that may have a particular benefit-cost ratio. Instead, they focus on needs that will be faced by the Airport during the planning period, even if another airport were built. For example, construction of an additional airport would not address the need to improve connections between hubbing flights at O'Hare. The

purposes and needs for the Proposed Projects exist today and would continue even if a new airport were built.

Other airports are available now. The Greater Chicago Region is currently served by five air carrier airports: O'Hare, Midway, Gary/Chicago, Rockford, and Milwaukee. Four of these airports are in addition to those specifically listed by the commentor, that could be utilized as alternative hubs for connecting flights. These airports were considered during the forecasting process when determining trends in connecting passengers. The forecasted demand would occur even with other hub airports available. The combination of extensive local demand and central location makes Chicago a natural location for hubbing operations and accounts for the fact that O'Hare is the only remaining dual hub for major airlines. It is unlikely that either of the major hubbing carriers would drop Chicago as a hub location for other locations – such as Mid-America or Denver – that do not have the same strength in local demand or the same central location. Even if some flights were moved elsewhere, doing so would not meet the needs for the passengers and flights that would still use O'Hare locally or for connection.

Increased use of existing airports or a new airport is evaluated in Chapter 3 of the EA. As noted in Chapter 3 of the EA, it is unlikely that existing hub or spoke carriers at O'Hare will shift operations from O'Hare; therefore the existing need for terminal improvements will persist. Other existing airports (e.g., Gary or Rockford) have excess capacity today, but have not significantly affected demand at O'Hare. These are market-based decisions under the direct control of the airlines for aircraft and the passengers choosing to fly. As mentioned earlier, other airports are available now. The forecasts on which the EA was developed accounted for the fact that there are already other airports serving all or parts of the Chicago Air Trade Area (a 13-county area in Illinois, Indiana, and Wisconsin, described in Chapter 1 of the EA) that would have excess capacity during the forecast period. However, airlines at O'Hare will continue to use O'Hare because of the importance of connections to other domestic and international flights. Neither FAA nor the City can require airlines or passengers to use any particular airport, and barring or restricting operations at O'Hare would not meet the purposes and needs of the World Gateway Program identified in Chapter 2 of the EA. For example, it would not improve the experience of connecting or local passengers at O'Hare. It would not provide appropriate gates for the aircraft that still use O'Hare. If flights were scattered between airports, connections would become more difficult as passengers would have to move between airports to connect between some flights. Further, such an approach would be economically impractical. The hub operations at O'Hare require a concentration of flights that converge and depart almost simultaneously to reduce operating costs and overall travel times for connecting passengers. Many domestic and international routes require connecting feed traffic to make them economically viable. Moving potential connecting flights away from the hub would result in the reduction of direct domestic and international service from Chicago. As discussed in Chapter 3 of the EA, neither hub or spoke carriers are likely to move operations from O'Hare.

Using another airport for international flights and then shuttling connecting passengers to and from O'Hare for domestic flights was also suggested but it would not meet the purpose and need for the World Gateway Program. As discussed in Chapters 2 and 3 of the EA, one of the critical goals of the World Gateway Program is to improve connections between domestic and international flights. The commentor's proposed alternative would degrade connections between domestic and international flights.

Further, moving operations would not affect regional inventories of air pollutants such as ozone, the only pollutant for which Chicago is not in attainment of the national ambient air quality standards. The proposed South Suburban Airport is in the same Chicago ozone non-attainment area as O'Hare. Ozone is a regional pollutant, so moving precursor emissions from one part of the region to the other would not improve regional air quality. Chapter 3 of the EA assesses potential alternatives to the Proposed Projects that would meet the purposes and needs identified in Chapter 2 and finds no reasonable alternatives. As discussed in Chapter 5 of the EA, the Proposed Projects would not lead to significant environmental impacts in any environmental category, nor would they have adverse impacts on the economy. The Proposed Projects would have no adverse safety impacts either, as discussed in Section 5.2.4 of the EA. Indeed, the Proposed Projects – especially the World Gateway Program – would reduce overall air pollutant emissions as compared to the No Action alternative and would reduce the number of nighttime flights that create noise during the period of greatest sensitivity.

Nonetheless, development of new or expanded airport facilities may serve other purposes and needs. FAA is currently evaluating the impacts of proposed site selection for a South Suburban Airport. Further, as discussed in Section 1.9 of the EA, the Mayor of the City of Chicago and the Governor of the State of Illinois have agreed to support development of a South Suburban Airport near Peotone, Illinois.

BENEFIT-COST ANALYSIS (See also ISSUES REGARDING REQUESTS FOR INFORMATION, PARTICULARLY REQUESTS UNDER FEDERAL OR ILLINOIS FREEDOM OF INFORMATION ACTS (FOIA))

Several commenting parties, including a representative of the Suburban O'Hare Commission had a variety of concerns regarding the Benefit-Cost Analysis for the Proposed Projects, particularly as it applies to the World Gateway Program. First, he alleges that the public has been denied details such as benefits, costs, financing, and impacts of the World Gateway Program. He states that the EA fails to include as an appendix the Benefit-Cost Analysis and make it available for comment. He believes that if the Benefit-Cost Analysis is performed according to FAA requirements, it will have a major impact on the life of the project for economic and environmental analysis. He alleges that these details have been withheld in violation of the record disclosure requirements of the Federal environmental laws. People have been forced to file a lawsuit under the Freedom of Information Act to obtain details. He feels that it is irresponsible,

illegal, and improper to proceed with expansion without examining the full economic, environmental and financial impacts on the overall program.

NEPA and its implementing regulations and orders do not require the inclusion of a Benefit-Cost Analysis (BCA) in an EA or EIS. Nonetheless, the EA provides information throughout regarding the benefits, costs, financing and impact of the Proposed Projects, including the World Gateway Program. Chapter 2 of the EA provides specific information regarding the purpose and need, benefits, costs and financing of the Proposed Projects. Chapter 2 and Appendix H of the EA also discuss the Benefit-Cost Analysis conducted by the City for the World Gateway Program and included in an application to FAA for a Letter of Intent regarding Airport Improvement Program (AIP) funds. This BCA – referenced in this discussion in the EA – has been part of the record of this matter, available since the release of the Draft EA on November 8, 2001, and available in its own right since February 28, 2001, when it was submitted to FAA as part of the Letter of Intent application. This document was updated February 28, 2002. Neither the City nor FAA has received any requests for the document during the public comment period. The commentor's only recent FOIA request was received by the City prior to the release of the Draft EA and related to the City's long-term concept proposal to the State of Illinois. That request did not mention World Gateway. In addition, no lawsuits have been filed against the City of Chicago or the FAA regarding any requests for information about the Proposed Projects under the state or Federal Freedom of Information Act.

As discussed in Chapter 8 of this ROD, the Proposed Projects are independent of the long-term concept, including runways, and are not connected actions that require a single environmental review, including economic and financial impacts under NEPA. Detailed analysis of the long-term concept plan would be speculative at this time because planning, analysis and other requirements for the concept plan have not been completed.

Both commentors state that the Benefit-Cost Analysis (BCA) requirements compel Chicago to carefully examine the economic benefits and costs of incremental alternatives-including demand management and other alternatives, which would reduce the benefit-cost ratio of the project to less than one, i.e., greater costs than benefits. Demand management need not be the total solution, but used in conjunction with other alternatives may provide better benefit-cost ratios than the World Gateway Program. The commentor states that the EA fails to adequately examine as alternatives the High-Density Rule, outlawing over-scheduling, requiring O'Hare's tenants to run fewer flights and other demand management controls.

Section 3.1.4.1 of the EA considered various approaches to demand management and concluded that they would not meet the purposes and needs for the Proposed Projects. Demand management would pose risks of aggravating some of the conditions that the Proposed Projects, and specifically the World Gateway Program, are intended to alleviate. For example, if demand management led to the de-peaking of the hub airline

schedules, it could lead to longer or less convenient connections than might otherwise be the case.

NEPA does not require that an environmental analysis include the detailed assessment of alternatives that do not meet the purpose and need for the proposed action. The purpose and need for the Proposed Projects are not tied simply to finding projects that may have a particular benefit-cost ratio, but instead to address specific terminal and other needs at the Airport. As discussed in Chapter 3, demand management would not meet the purposes and needs for the Proposed Projects. The commentors do not identify reasonably foreseeable demand or capacity forecast scenarios they believe are appropriate and/or indicate whether and how such forecasts would significantly affect the environmental analysis in this EA. More specific, the commentors do not demonstrate how demand management approaches would meet the purposes and needs for the Proposed Projects. In that the purpose and need of this project would not be met, the analysis of demand scenarios that include the imposition of demand management would not be required by NEPA.

Several other commentors had concerns. One dealt with the method used to consider delay in the Cost Benefit Analysis. He believes that the environmental process cannot use alleviation of delay to calculate benefit. Planes could go to a new airport where delay will not exist either there or at O'Hare Airport. It must be factored in that more planes may create delay as well that would not exist if O'Hare were not being considered for more traffic. The other commentor expressed concern that the cost of expansion at O'Hare is too great and cannot be justified for simple upgrades.

The economic benefits of the World Gateway Program far outweigh its associated capital costs, as demonstrated by the formal Benefit-Cost Analysis (BCA) conducted by the City in accordance with the FAA's Airport Benefit-Cost Analysis Guidance. A BCA is used by the FAA to determine if a project's benefits exceed its costs, and therefore make it a worthy investment.

As discussed in Chapter 2 of the EA, the Proposed Projects, including the World Gateway Program, are not simple redecoration or upgrade efforts, but infrastructure improvements that will meet a number of specific needs in the Airport's terminals and roadways. Chapter 2 of the EA also summarizes the results of financial analysis that shows that savings associated with lost time for passengers and avoided costs for airlines will outweigh the costs of the Proposed Projects.

O'HARE FUNDING FOR PROPOSED PROJECTS AFFECT ON FUNDING FOR OTHER EXISTING AND NEW AIRPORTS AND FUTURE O'HARE RUNWAY CONCEPT PLAN

Several commentors proposed that the EA should discuss the impact of the use of AIP funds for World Gateway Program on available federal funding for the South Suburban Airport as well as for the long-term concept.

The funding for the Proposed Projects, including the World Gateway Program, will be approximately 94% derived from aviation activity at O'Hare International Airport, rather than state and local taxes or Federal funds. Sources of funds would include Passenger Facility Charge (PFCs), PFC backed bonds, and General Airport Revenue Bonds (GARBs). The former (PFCs) are charges, authorized by the Federal government, placed by the City on passengers using O'Hare International Airport and the latter (GARBs) are bonds that are repaid from general airport revenues, including airline rates and charges. The remaining six percent of the Proposed Projects cost is proposed to come from Federal Airport Improvement Program (AIP) grants.

The Federal Airport Improvement Program (AIP) has traditionally made two kinds of grants available for airport development projects – Entitlement Grants and Discretionary Grants. Entitlement Grants are allocated to each airport based on actual annual passenger and cargo activity at that airport. They are not competitively awarded. AIP Discretionary Grants are awarded by the FAA based on requests from airports and the FAA's nationwide priorities. AIP was reauthorized by Congress in 2000 with the following funding authorizations by fiscal year: 2000 -- \$2.475 billion; 2001 -- \$3.2 billion; 2002 -- \$3.3 billion; 2003 -- \$3.4 billion. The amount of funding that will be appropriated for AIP in subsequent years is not known as it depends on future Congressional action.

The City will be seeking funding from the AIP Discretionary allocation of approximately \$182.9 million for the Proposed Projects, including the World Gateway Program. This represents approximately 4.8 percent of the total cost of the Proposed Projects.

The City is proposing a ten-year disbursement schedule for these funds, with the projected annual funding increasing from \$12.9 million in 2003 to \$25.5 million in 2012. Nearly 50 percent of the AIP Discretionary funding is projected for the final four years of the Program. The City's requested Discretionary Grant funding for fiscal year 2003 would represent approximately 3.8 percent of the AIP discretionary authorization for that fiscal year. The potential impact of the award of AIP Discretionary Funding to the World Gateway Program on other airport projects is impossible to assess with any degree of precision. The key point is that in determining whether to award Discretionary Grants, the FAA will evaluate each project on its own merits at the appropriate time, in the context of nationwide requests and its established priorities.

FLOODPLAINS

A few commentors had concerns about floodplain issues. A representative of the Federal Emergency Management Agency (FEMA) indicated that compliance with Executive Order 11988, Floodplain Management must be assured and that practicable floodplain alternatives must be fully analyzed. In addition, there were a few comments that the EA must specifically state how impacts to floodplains will be mitigated if the Touhy Detention Basin and Structure 140 are not fully operational prior to development of the project. One commentor also requested that floodplain mitigation consider surrounding communities through stormwater management.

Section 5.13 of the EA describes the analysis of potential impacts to floodplains caused by the Proposed Projects, as well as the basis for the determination that there are no practicable alternatives that would avoid impacts to the 100-year floodplain. The analysis follows the FAA's guidance for preparation of environmental assessments in compliance with the National Environmental Policy Act (NEPA), as set forth in the Airport Environmental Handbook, FAA Order 5050.4A. Paragraph 47(e)(12) of the FAA Order implements Executive Order 11988 as well as DOT Order 5650.2, and establishes requirements that parallel the Federal Emergency Management Agency (FEMA) regulations at 44 CFR Part 9, including the elements of FEMA's eight-step process described in 40 CFR § 9.6 through 9.12. The FAA Order covers the same substantive areas as the FEMA regulations. FAA's requirements include the following: avoidance of floodplain encroachments unless there are no practicable alternatives; determination of any impacts caused by such encroachment; minimization or mitigation of any such impacts; and a determination of the significance of any encroachment. Opportunities for public review of possible floodplain encroachments have been provided through the scoping process, the agency review process, and through the public hearing and comment period provided after the Draft EA was issued.

Section 5.13 of the EA also documents the City's compliance with these requirements by describing the impacts of the Proposed Projects, potential alternative actions to avoid floodplain impacts, and minimization and mitigation measures of unavoidable impacts. The location of the base floodplain in relation to the Proposed Projects is depicted in Exhibits 5.13.2 and 5.13.3 of the EA. Section 5.13.1.2 of the EA describes the actions that the Airport will take to minimize and mitigate the floodplain encroachment associated with the Lee Street/Northwest Tollway Interchange and the Lynxs Cargo Facility Relocation. The Airport will design these facilities to control any increased stormwater runoff that results from these encroachments. This permanent flood storage capacity will be provided through the construction of stormwater detention basins. The Chicago Department of Environment's policy for implementing Chicago Ordinance Chapter 16-6 is to require compensatory storage at a ratio of 1.5:1. Applying this ratio to the project's impacts will result in compensatory flood storage of 7.2 acres. The Airport will also implement best management practices during construction to minimize soil erosion and sedimentation, as recommended by the FAA Order, and will provide temporary flood storage capacity by constructing temporary detention basins until the Touhy Avenue Detention Basin and Structure 140 are fully operational. Temporary detention basins would be included in the design of these Proposed Projects if needed.

WETLANDS

A few commentors had concerns about wetland issues. Most comments were from resource agencies, i.e. Illinois EPA and USEPA seeking clarification of information provided in the Draft EA. The primary concerns were related to the cumulative impact analysis of wetlands. Comments stated that the EA should have discussed existing efforts to mitigate wetland impacts from other projects that were evaluated in the cumulative impacts analysis. The commentor states

that it is not clear if all of the projects have undergone NEPA analysis, and, if so, when will construction begin on those projects.

Sections 5.12.2 and 5.22 of the EA provide a description of the wetland impacts that will occur as a result of implementing the Proposed Projects, as well as those wetland impacts that are reasonably foreseeable at the Airport or in its vicinity. These sections have been revised in the Final EA to incorporate new information regarding the wetland impacts associated with recent Airport mosquito control efforts, and to update the total acreage of wetland impacts associated with the Proposed Projects.

The wetland impacts associated with the Runway Protection Zone (RPZ) project, the O'Hare Express North Site project, the Touhy Avenue Detention Basin and Structure 140 flood control structures, and certain other recent improvements to airport-related facilities have all been addressed in separate National Environmental Policy Act (NEPA) analyses. Dates of the respective environmental assessments associated with these projects are provided in the footnotes to Section 5.12.2 of the EA. Implementation of the RPZ project will begin when the Airport is ready to proceed and has received the appropriate approvals from the U.S. Army Corps of Engineers. Two small wetlands evaluated in the EA for the RPZ project that are outside of the jurisdiction of the Corps of Engineers have been removed as part of a mosquito hazard abatement project conducted last year. There is no schedule for the filling of the other RPZ wetlands. Construction of the O'Hare Express North Site project is expected to begin in the near future. Construction of the Touhy Avenue Detention Basin is scheduled to begin in 2002, becoming operational in 2004, while Structure 140 is currently under construction and will be completed in 2003. Section 5.12.2 of the Final EA also describes a project undertaken last year by the City of Chicago to remove some isolated wetlands that posed risks associated with mosquito-borne diseases.

Future projects involving federal approvals and impacts to wetlands, such as the improvements to I-190, will undergo environmental review under NEPA as they become ripe and when sufficient detail about design and construction of the proposed improvements is available.

The Airport plans to mitigate any adverse impacts to jurisdictional wetlands either with offsite creation of wetlands, enhancement of existing wetlands, or through purchase of credits in an existing wetland mitigation bank. See Section 5.12.4 in the Final EA for further information

An additional comment from NIPC was made recommending that stormwater storage resulting from wetland impacts be replaced in Des Plaines River watershed.

As noted in Section 5.12.1 of the EA, many of the wetlands impacted by the Proposed Projects are poor quality, isolated wetlands that do not perform significant flood or stormwater storage functions. Therefore, loss of these wetlands will not have significant impacts on flooding in the communities surrounding the Airport.

Furthermore, the flooding noted by NIPC may be greatly reduced through implementation of the Touhy Avenue Detention Basin and Structure 140 in the near future. As described in Section 4.8 of the EA, construction of the Touhy Avenue Detention Basin and Structure 140 will substantially reduce the size of the floodplain along Willow-Higgins Creek within the north airfield.

Options for compensatory wetland mitigation within the Des Plaines watershed will be considered. Appropriate wetland mitigation may, however, necessitate the use of mitigation sites located elsewhere if adequate mitigation opportunities are not available within the Des Plaines watershed.

AIR QUALITY AND AIR TOXICS

A number of commenting parties expressed concern about the effects of air pollution. Several commentors expressed concern about air toxic emissions from aircraft. They indicated that communities are enduring unacceptable and illegal levels of air pollution from the Airport. They assert that O'Hare is the number one commercial polluter in Illinois, and O'Hare underreports the amounts of pollution emitted. More planes, flights, and cars will lead to more air pollution. Emissions and the resulting support and arterial ground traffic, pose many serious threats to human health and our environment.

Existing air pollution conditions are discussed in Section 4.12 of the EA and the effects of the Proposed Projects on air quality are evaluated in detail in Section 5.6 of the EA. As discussed in Section 4.12 of the EA, available scientific evidence suggests that the Airport is only a small contributor to area air pollution, including particle deposition and air toxics. The O'Hare area is surrounded by a multitude of non-airport sources of diesel and other emissions that affect overall air quality. As discussed in Section 5.6 of the EA, implementation of the Proposed Projects will reduce overall emissions of air pollutants, meaning that federal action will lead to an improvement of expected conditions. The Proposed Projects will reduce emissions of both criteria and air toxic pollutants. Further, dispersion modeling showed no projected violations of federal ambient air quality standards.

Section 4.12 of the EA evaluates current air quality conditions, including concerns related to air toxic pollutants. It specifically identifies some of the air toxics often identified as greatest concern for airports and notes the potential health impacts. There are currently no federal or state standards for air toxic pollutants beyond the federal ambient air quality standards for lead, ozone precursors, and particulate matter. The United States Environmental Protection Agency (USEPA) has indicated that they have not established risk levels associated with mobile source air toxic pollutants that represent regulatory thresholds (e.g., USEPA, Office of Air and Radiation, Control of Emissions from Hazardous Air Pollutants from Mobile Sources: Response to Comments, page 15, Dec. 2000). Airport-area air quality monitors over the last few years have shown no violations of the national or state ambient air quality standards.

Finding of No Significant Impact / Record of Decision

Further, as also discussed in Section 4.12 of the EA, the air toxics levels cited in the Park Ridge Air Quality Study for sites at or near O'Hare are (1) in the range deemed "acceptable" by USEPA in its air toxics program; and (2) comparable to air toxics levels elsewhere in metropolitan Chicago away from the Airport and in other urban areas. Monitoring near the Airport conducted by the Illinois Environmental Protection Agency (IEPA) reached the similar conclusion that air toxics levels at the site east of O'Hare were not higher than levels elsewhere in the Chicago area (see Section 4.12 of the EA for more detail). And, as also discussed in Section 4.12.4.3 of the EA, studies conducted by the City of Chicago have shown that the Airport contributes only a small share of air toxics in the area surrounding the Airport.

Predicted reductions in volatile organic compound (VOC) emissions from aircraft and other sources (see Section 5.6 of the EA) -- with or without the Proposed Projects -- mean that Airport contributions to health risks will likely continue to decline during the forecast period. The USEPA also expects concentrations of air toxics associated with on-highway motor vehicles to drop significantly in the next twenty years as the result of more stringent standards for motor vehicles and turnover of the motor vehicle fleet. As discussed in Section 1.7 of the EA, the existing airfield and terminal infrastructure can and would accommodate all forecast aircraft operation activity through the horizon year of 2012. Accordingly, the World Gateway Program would not increase the number of aircraft operations, thereby not increasing aircraft emissions over the emissions from the No Action alternative.

The comment that O'Hare is the "number one commercial polluter in the State of Illinois" is misleading. Neither the IEPA nor the USEPA include public transportation facilities on the lists of commercial, stationary polluters to which the commentor refers. Both federal and state law treats stationary sources (such as power plants and factories) and mobile sources (such as aircraft, automobiles, trucks, railroads, construction equipment) differently.

As discussed in Section 1.7 of the EA, the existing airfield and terminal infrastructure can accommodate forecast aircraft operations through 2012. Accordingly, the implementation of World Gateway Program would not increase the number of aircraft operations through 2012. Thus, the same number of operations is projected with or without the World Gateway Program, but the Proposed Projects will reduce aircraft delays on the ground. The Proposed Projects will lead to an increase in the number of automobile trips to and from the airport, but the proposed road improvements will improve traffic flow. The net result will be a reduction in the emission of pollutants. Refer to Table 5.6.1 Emissions Inventory Summary, which demonstrates the decrease in the quantity of emissions, for every criteria pollutant, with the implementation of the World Gateway Program.

For more information regarding comments related to air quality impacts and air toxics, refer to Section E of Appendix S of the Final EA

NOISE ISSUES

A number of commenting parties expressed themselves regarding a variety of noise issues. One set of issues concerned the use of ambient noise monitoring, particularly as input to the noise modeling. Another set of issues revolved around the computer noise model used in preparation of the EA. Related to the computer noise model was a third set of issues regarding the proper noise metric. A fourth set of issues was the commenting parties concern that the EA process had not provided adequate baseline noise pollution assessments and disclosures. A fifth set of issues was raised by parties that had concerns about existing noise impacts and those that can be expected with the World Gateway Program and cumulatively with the long-term concept plan. A sixth set of issues dealt with the availability for public scrutiny of data and documents used to disclose the noise impacts associated with the Proposed Projects. These issues are addressed sequentially below. Finally, some of the other comments provided were very specific and did not constitute a general environmental issue. The response to these comments can be found in Section F of Appendix S of the Final EA.

As mentioned earlier, several commenting parties had concerns regarding ambient noise monitoring; some alleged that the existing noise monitors do not measure real noise events as all noise readings are averaged. They also were concerned how the data was used. Finally, one also asked to have the EA compare/show available monitoring data.

One of the commenting parties' concerns was regarding the use of ambient noise monitoring. Depending on how they are used, permanent noise monitors can be very effective in measuring the noise levels present from all sources at their specific location. At O'Hare, single-event noise sources including aircraft, automobiles, railroads and ambient noise are measured by the permanently installed noise monitors. Each noise monitor, including the three located in Park Ridge, continuously records all noise sources 24 hours a day, 365 days a year. Chicago's Airport Noise Monitoring System (ANMS) also collects FAA flight track data that is used in distinguishing aircraft noise events from other noise sources at each monitor. Data from this system is used to measure actual noise events, identify noise-affected areas, track changes in noise levels over time, identify sources of particularly loud noise events, and monitor compliance with the noise abatement procedures. The system can report noise levels for single events and cumulative noise levels over given periods of time. However, because noise monitors cannot predict future conditions, this EA relies upon the FAA's Integrated Noise Model (INM) to analyze the impacts of the Proposed Projects. INM is FAA's required tool for assessing the impacts of aircraft noise, and therefore ambient noise monitoring was not used in this analysis. Appendix G provides information to support the INM results discussed in Section 5.1 of the EA.

One commentor asserts that the computer noise model is incorrect because it underestimates community noise. The EA improperly relies on average noise metrics. Another commentor insists that if the INM model is used it should not be used without independent validation of all model input.

The commentors provide no bases for their beliefs that the Integrated Noise Model (INM) is incorrect. The EA relies upon INM for the development of noise exposure patterns for current and projected future conditions around the airport. It is the state of the art aircraft noise model currently found acceptable for application to civilian airports and has been accepted for use within the United States and many foreign countries. As a model of the average annual noise conditions, when correctly programmed, it captures all of the aircraft noise energy to which an area is exposed during the 365-day year. Because it is an averaging model, it will under-predict the noise levels on some days in areas of activity exceeding the annual norm, and over-predict the noise levels in the same area when the activity is less than the annual norm. The INM is the required tool for the development of aircraft noise exposure patterns in all Environmental Assessments prepared for review and acceptance by the Federal Aviation Administration (See "Airport Environmental Handbook," FAA Orders 5050.4A and 1050.1D "Policies and Procedures for Considering Environmental Impacts", Section 13.b.)

The EA relies upon the average noise metric (Day Night Sound Level or DNL (Ldn)) for the presentation of the average annual noise exposure levels in the airport environs. The FAA specifically requires the use of DNL in describing aircraft noise in environmental assessments and impact statements. See FAA Orders 1050.1D and 5050.4A. The use of the DNL metric in airport noise and environmental studies was reconsidered in 1992 by the Federal Interagency Committee on Noise (FICON), which included representatives of the Federal Aviation Administration, Department of Transportation, Environmental Protection Agency, Council on Environmental Quality, Department of Defense, Housing and Urban Development, the Department of Justice, and the Department of Veterans Affairs. FICON concluded that DNL, which had been in longstanding use at the time, remained the best overall noise metric for use in airport noise studies, but that other supplemental metrics could also be used appropriately to enrich the understanding of noise exposure in particular situations (*Federal Interagency Review of Selected Airport Noise Analysis Issues*, Federal Interagency Committee on Noise (FICON), August 1992, Section 2.2.). Also, see Appendix F of the EA, page F-6 et seq., for further justification of use of the DNL metric.

The noise analysis undertaken for this EA did use other noise metrics, including single event metrics and the average time per day that noise exceeded a given noise level threshold, to supplement the DNL analysis described in Section 5.1 of the EA. This analysis is presented in Appendix G of the EA, page G-4 et seq. and tables G-1 and G-2.

As to the issue of independent validation of the noise modeling, two independent entities have been involved. The O'Hare Noise Commission (ONCC) hired an independent noise consultant to evaluate the operational data on which the noise

modeling for the 1997 and 2000 baseline noise analyses was based, as well as the methodology used, and the results of the modeling. The ONCC's consultant determined that both the data and methodology were skillfully and thoroughly interpreted. FAA's Environmental Review Contractors also reviewed this information during the preparation of the EA and concluded that the INM was correctly applied.

One commenting party asserts that there has been significant discussion among noise experts that the DNL noise metric is inadequate to fully describe the adverse impacts of aircraft noise. He alleges that there is no discussion of these views in the EA or the application of these alternative metrics in assessing the impacts of World Gateway Program. The commentor states that: averages understate "single events" and it is these single loud noises as the airplanes fly overhead that can disrupt sleep, and adversely impact people's well being; that many communities restrict single noise events to 55-65 cBA [sic] in residential areas; and the World Health Organization (WHO) recommends maximum outdoor daytime/evening noise impacts of 50-55 dB LAeq [sic] and 30 dB LAeq [sic] (with a minimum number of peaks at 45 dB Lmax [sic]) in bedrooms.

Another commentor alleges that the FAA and FICAN/FICON have unjustifiably accepted the 65 dBA DNL as the standard for determining "significant" noise impact. The commentor states that: in reality, substantial impacts occur to millions of people well below the 65-decibel level; FAA, EPA and NASA documents agree that 55 DNL and below is the point at which noise is "safe"; that the FAA should use 55 dB CNEL to more realistically take into account the human impacts to the events; and 55 CNEL is the point at which experts the world over, including the EPA, more realistically determine that human health is affected by aircraft noise.

The commentor also mentions that the World Health Organization cites the potential impact and health hazards of low frequency noise in their 1995 and 1999 community noise documents. The commentor states that: the 1995 document calls into question the validity of "A" weighting; a standard that measures low frequencies is necessary to reflect the impact of low frequency noise; a more realistic measure than the Day-Night Level (DNL) metric is needed to determine the effects of noise on the populace; and that the CNEL should be taken into account for earlier evening hours.

As mentioned earlier, DNL is the required metric for describing noise in Environmental Assessments. Under the rules guiding the development of environmental documents set forth by the FAA in its Orders 5050.4A (Airport Environmental Handbook) and 1050.1D (Policies and Procedures for Considering Environmental Impacts, Section 13), impacts must be disclosed using the DNL metric. However, supplemental information on other metrics may be included if it would assist the federal decision maker in making an informed decision on the effects of the proposed project. Appendix G of this EA provides such additional information in the form of outdoor Leq, SEL, Lmax and Time-Above 65 decibels during an average 24-hour period. This supplemental information is provided for 27 separate locations within the airport environs that would experience the

only area of potential noise increases. At none of these locations do the Proposed Projects result in a “significant” change in the noise environment compared to the No Action alternative.

The commentor has incorrectly characterized the use of noise thresholds by Federal agencies. FICON (composed of several federal agencies, including the FAA, EPA and the Department of Defense (DOD), among others) endorsed the DNL metric as the best available tool for describing community noise exposure from transportation sources and supported the use of 65 DNL as the level above which significant impacts are created for residential land use (Federal Interagency Review of Selected Airport Noise Analysis Issues, Federal Interagency Committee on Noise (FICON), August 1992, Section 2.2). The FAA has adopted the 65 DNL level as “significant” for the description of impacts. (See FAA Orders 1050.1D and 5050.4A.) The FAA's land use guidelines for noise compatibility planning clearly state that it considers the threshold for significant residential compatibility conflicts to begin at 65 DNL. (See FAR Part 150, Appendix A, Table 1.) The EA applies current FAA standards in its disclosures of noise impacts. The 55 DNL (not CNEL as suggested by the commentor) level was identified by the USEPA decades ago as a level, including a protective margin of error, which involved no impacts. It was not intended to represent a threshold of significant impact.

WHO's community noise documentation published in 1999 cites low frequency noise as being of concern in specific instances. It states “A-weighted measures have been particularly criticized as not being accurate indicators of the disturbing effects of noises with strong low frequency components.” (*Guidelines for Community Noise*, edited by B. Berglund, T.Lindvall, and D.H. Schwela. World Health Organization, Geneva, Switzerland, 1999, p. 28.) The report adds, however, “these differences in prediction accuracy are usually smaller than the variability of responses among groups of people. Thus, in practical situations the limitations of A-weighted measures may not be so important.”

It also noted, “several countries have changed to measures that are based on the equal energy principle and A-weighted sound pressure levels.” (*Guidelines for Community Noise*, edited by B. Berglund, T.Lindvall, and D.H. Schwela. World Health Organization, Geneva, Switzerland, 1999, p. 36.) (The United States has been following this practice for many years in its widespread use of the A-weighted DNL metric.) WHO recommends continuing the current practice of using the equal energy principle and A-weighted sound pressure levels because this will “indicate reasonably well the expected effects of the noise.” (*Guidelines for Community Noise*, edited by B. Berglund, T.Lindvall, and D.H. Schwela. World Health Organization, Geneva, Switzerland, 1999, p. 29.) WHO does not recommend a standard for assessing the potential impact of low frequency noise on health. Such a standard will require the scientific community to conduct more research and reach agreement on how to measure the effects of low-frequency noise on people.

A commenting party asserts that the City's EA is inadequate because the EA has not performed adequate baseline noise pollution assessments and disclosures

as some of the components of an evaluation of health and environmental impacts. He asks that a baseline of all noise pollution now generated by all O'Hare Airport operations be identified both on and off airport grounds. He goes on to request a variety of specific baseline data and makes the assumption that there will be additional noise impacts. He also asks for answers to a variety of specific questions regarding the effects of noise on humans, animals and structures.

Both of these categories of comments and specific responses are listed in Section F in Appendix S of the Final EA. Most of the responses refer the commenting party to Appendix F of the EA where a survey of research on noise and its effects on humans is presented. Making sweeping generalizations about the impacts of noise on people is difficult because of the wide variations in individual reactions. Much has been learned, but some physical and psychological responses to noise are not yet fully understood and continue to be debated by the scientific community. Effects on the general physical and mental health of airport neighbors have been examined in research literature. The question of pathological effects remains unsettled because of conflicting findings based on differing methodologies, uneven study quality, and the very small effect of noise on health outcomes compared with other stronger influences. While research is continuing, there are no adopted criteria or threshold that could quantify any effect aircraft noise might have on physical and mental health.

No adverse health effects from aircraft noise-induced vibration were reported in the reviewed research. Findings explained in Section 5.1 of the EA show that there would be no significant changes in DNL levels with the implementation of the Proposed Projects. Thus, no adverse effects on children's health, motivation, and education are anticipated. Appendix F of the EA includes a brief review of the research literature on the effects of noise on health. No criteria or thresholds have been uniformly established with respect to noise impacts on animals.

Appendix F of the EA, "The Measurement of Noise and its Effects on Humans," discusses research on the response of individuals and communities to noise-related annoyances, including sleep disturbances.

A review of the research regarding the effects of aircraft noise and vibration was provided in Appendix F of the EA. No adverse health effects caused by aircraft noise-induced vibration was reported in the reviewed research. Several studies sponsored by major U.S. airports have investigated the level of annoyance of secondary emissions (i.e., rattling windows caused by vibration) associated with low-frequency runway sideline noise. The studies found that low-frequency noise may cause vibration, which may be a source of annoyance to residences located within the immediate vicinity of a runway. There is, however, no formal standard or recommendation by any agency with regulatory jurisdiction over noise or an interest in noise that has identified a particular low-frequency sound level or threshold.

The Proposed Projects would not increase aircraft operations or affect their flight tracks compared to the No Action alternative, so they would not significantly change low- or high-frequency noise levels or vibrations.

These questions are adequately answered in Appendix S and are not repeated here. Findings explained in Section 5.1 of the EA show that there would be no significant changes in DNL levels with the implementation of the Proposed Projects. Thus no adverse effects are anticipated from any of the noise impacts.

The commentor's assertion that the EA is inadequate with regards to the noise analyses is unfounded. As described in Section 5.1 of the EA, the baseline noise assessments were conducted in accordance with the rules guiding the development of environmental documents set forth by the FAA in its Orders 5050.4A and 1050.1D which provide that impacts must be disclosed using the DNL metric. Supplemental information on other noise metrics is provided in Appendix G of the EA.

Several commenting parties expressed concerns that the World Gateway Program would increase noise. More planes, flights and cars will lead to more noise pollution. They didn't see how building terminals could reduce the noise impacts, as indicated in the EA. Some noted that freight flights cause most of the current nighttime noise levels and they asked if they are reduced with the World Gateway Program. Other commenting parties assert that the combination of the World Gateway Program and the concept runway plan will lead to more noise. Some commentors assert that for some, like those in Park Ridge, the increase may be significant, e.g., 2,500 percent, while it may reduce the number of homes subjected to 65 dB or greater noise in other communities around O'Hare.

The aviation activity forecasts used in developing the noise analysis assumed continued increases in the average number of seats per flight that will allow enplanements to increase at a faster rate than operations. However the forecasts also assumed growth in operations over time. Therefore, a reduction in the number of noise events is not expected. On the other hand, the Proposed Projects will result in a decrease in the number of noise events at night compared to the No Action alternative. See Section 5.1 of the EA that compares the DNL noise contours in 2007 and 2012 for the Proposed Projects with those of the No Action alternative. Noise reductions with the Proposed Projects were projected in both future years because fewer flights would be delayed into the nighttime hours (when they would be subject to a 10-decibel penalty in the DNL computation). While the terminal buildings themselves have no direct impact on airport noise, the small noise reductions that are projected with the Proposed Projects would occur because fewer flights would be delayed into the nighttime hours. This is because the improved terminal facilities will improve gate availability and reduce delays on the ground caused by passenger aircraft waiting for a properly sized gate to become available. However, it would not affect nighttime air cargo operations, which are likely to continue to grow. An analysis of the nighttime activity levels from January through April 1999 indicated that freight operations accounted for 49 percent of all nighttime (10 p.m. to 7 a.m.) activity. During the

previous year, freight operations accounted for 52 percent of nighttime activity. Based on Appendix E of the EA, page E-121, all-cargo operations were forecasted to grow at a three percent annual compound growth rate between 1997 and 2012 with or without the Proposed Projects. In contrast, the 65 DNL area is expected to decrease by 58 percent between 1997 and 2012 with the Proposed Projects (refer to Section 5.1 of the EA). The reduction is attributed to a decrease in air carrier flights delayed into the nighttime hours and the use of newer and quieter aircraft by both the air carriers and cargo operators. The latter is described below.

A significant portion of the cumulative noise levels of noise events should decrease over time due to the gradual removal of older, louder aircraft remaining in the commercial fleets. The loudest aircraft have generally not been in production for many years, and as they age out of usefulness, they will be removed in favor of newer (and quieter) aircraft. This has been noticeable since September 11, 2001, as American and United Airlines have both removed the louder retrofit 727 aircraft from their operating fleet because they are more financially demanding than the newer aircraft. Furthermore, new aircraft are in development that will have even lower noise levels. An ongoing NASA research program is intended to develop technology through a variety of techniques (engine modifications, airframe adjustments, operating procedures, etc.) with the goal of reducing average aircraft noise levels by 20 decibels from early-1990 levels. At this time, the average level has been reduced by approximately 10 decibels from the baseline.

With respect to the commentor's statement that noise levels could increase by as much as 2,500 percent, this comment may refer to the proposed runway redevelopment plan announced by Mayor Daley in the summer of 2001. As discussed in Section 1.9 of the EA, the Proposed Projects are independent of the runway concept plan. Further, the runway concept plan has not yet been prepared with sufficient detail to be ready for a thorough environmental review. When the plan is developed, it will be subject to an EIS in accordance with the National Environmental Policy Act and FAA Orders 1050.1D and 5050.4A. That process will involve further opportunities for public review and comment. As to an increase in noise from cars, Section 5.1.3 of the EA deals directly with roadway noise exposure as a result of the Proposed Projects. Roadway noise levels with the Proposed Projects would be the same as with the No Action alternative at three of the noise-sensitive locations. Noise would actually decrease slightly compared with the No Action Alternative at one noise-sensitive location. All future roadway noise levels would be far below the Federal Highway Administration's threshold of 67 dBA Leq(h), the level above which noise abatement considerations are warranted.

Another concern was the cumulative noise impacts with the combination of the World Gateway Program and the long-term concept including runway development.

Section 1.9 of the EA, describes how the Proposed Projects are independent of the concept announced by Mayor Daley in the summer of 2001. Further, the concept has

not yet been prepared with sufficient detail to be ready for a thorough environmental review. When the plan is developed, it will be subject to an EIS in accordance with the National Environmental Policy Act and FAA Orders 1050.1D and 5050.4A. That EIS will be required to consider the cumulative environmental impacts of all recent and reasonably foreseeable future projects, including the World Gateway Program. That process will involve future opportunities for public review and comment. See Section 5.22 of the EA for available preliminary information regarding potential cumulative noise effects associated with the concept.

Another commenting party alleges that Chicago has failed to make available the data and documents with respect to the noise impacts that it says will result from the program, and again, has not adequately reflected it in the City's analysis. He asks that all data and computer manipulations of the noise modeling be made available for public scrutiny.

Section 5.1 and Appendix G of the EA contain data used in the aircraft and roadway noise analyses, as well as references to other information relied upon for the noise analyses. This includes average daily operations by aircraft type, average daily operations by time of day, average daily operations and runway use percentages. Because of the large volume, detailed flight track data was not included in the EA itself, but was referenced in the EA. Future flight tracks were determined to be the same as 1997 baseline conditions because no close-in airspace or runway changes are anticipated by the Proposed Projects. This noise information has been available since publication of the Draft EA on November 8, 2001. Neither FAA nor the City received requests for this information during the public comment period other than the request included in the comment provided to the City on the last day of the comment period. All noise model input and output files were sent to the commentor on February 22, 2002. Further, as discussed in Section 5.1 of the EA, complete information relating to the 1997 and 2000 baseline contours has been provided to entities independent of the City and FAA, and has been subject to independent expert validation. This is also addressed in an earlier section of this chapter of the ROD entitled ISSUES REGARDING REQUESTS FOR INFORMATION, PARTICULARLY REQUESTS UNDER FEDERAL OR ILLINOS FREEDOM OF INFORMATION ACTS (FOIA).

10. FEDERAL AGENCY FINDINGS

In accordance with applicable law, the Federal Aviation Administration (FAA) makes the following determinations for the Proposed Projects, based upon the appropriate information and data contained in the Final Environmental Assessment (Final EA) and the administrative record.

A. The project is consistent with existing plans of public agencies for development of the area surrounding the airport (49 U.S.C. 47106(a)(1)).

The determination prescribed by this statutory provision is a precondition to agency approval of airport project funding applications. It has been the long-standing policy of the FAA to rely heavily upon actions of Metropolitan Planning Organizations (MPOs) to satisfy the project consistency requirement of 49 U.S.C. 47106 (a) (1) [see, e.g., *Suburban O'Hare Commission v. Dole*, 787 F.2d 186, 199 (7th Cir., 1986)]. Furthermore, both the legislative history and consistent agency interpretations of this statutory provision make it clear that reasonable, rather than absolute consistency with these plans is all that is required.

Under the provisions of both federal and state law, the Chicago Area Transportation Study (CATS) has been designated as the MPO for the northeastern Illinois region. The MPO is responsible together with the state for carrying out the urban transportation planning in this region. The northeastern Illinois region includes: Cook, DuPage, Kane, Lake, McHenry and Will counties and a portion of Kendall County. CATS did not officially comment on the Draft EA but was given an opportunity. The data for surface transportation planning used assumptions and data provided by or agreed to by CATS.

The Northeastern Illinois Planning Commission (NIPC) is the official comprehensive planning agency for the six-county Chicago metropolitan area. The Commission was created by the Illinois General Assembly and assigned three broad responsibilities:

- To conduct research required for planning.
- To prepare comprehensive plans and polices guiding development.
- To advise and assist local governments.

NIPC is authorized by the State of Illinois to plan for the development of the Chicago Metropolitan area, including the area surrounding the airport. In this effort, NIPC works closely with CATS, the Region's MPO, to develop and maintain the Regional Transportation Plan. NIPC's role is advisory. NIPC prepares and disseminates descriptive information about the region and its needs such as the regional forecasts. NIPC also fosters cooperation among units of government and between the public and private sectors. It strives for consensus on polices and plans for action that will promote the sound and orderly development of the northeastern Illinois area.

NIPC, in a letter dated December 26, 2001, indicated that, "The content and key findings of the Draft EA were examined to determine their relationship and, where applicable, consistency with the adopted plans and policies of the Commission. The document was found to be generally consistent with NIPC's adopted policies, objectives and guidelines."

The FAA finds that the Proposed Projects are reasonably consistent with the existing plans of public agencies authorized by the state in which the airport is located to plan for the development of the area surrounding the airport. The FAA is satisfied that it has fully complied with *49 U.S.C. 47106 (a)(1)*.

The proposed expansion is also reasonably consistent with comprehensive plans that have been adopted by jurisdictions in the vicinity of the airport as described in Chapter 6 of the EA. However, the FAA has also reviewed and considered the substantial documentation in the administrative record demonstrating that throughout the environmental process, the City of Chicago has shown concern for the impact of the proposed development actions on surrounding communities, particularly Rosemont. Implementation of the City of Chicago's preferred alternative would not be expected to result, after mitigation, in any significant increases of noise on land of neighboring jurisdictions.

In making its determination under *49 U.S.C. 47106 (a) (1)*, the FAA has considered the fact that local governments have been represented by NIPC and have participated as members of that organization in its decision that the Commission's analysis of the Draft EA for the Proposed Projects at O'Hare found the Draft EA to be in compliance with applicable rules and regulation for the content of such documents. The FAA has also recognized the fact that none of these jurisdictions has regulatory authority over airport operations, since long-established doctrines of Federal preemption preclude these communities from regulating aircraft operations conducted at O'Hare.

B. The interest of the communities in or near where the project may be located was given fair consideration (*49 U.S.C. 47106(b)(2)*).

The determination prescribed by this statutory provision is a precondition to agency approval of airport development project funding applications. The regional planning process over the past decade and the environmental process for this project-specific EA, which began in 1998 and extended to this point of decision, provided numerous opportunities for the expression of and response to issues put forward by communities in and near the project location. Nearby communities and their residents have had the opportunity to express their views during the Draft EA public comment period, and at a public hearing on the Draft EA. The FAA's consideration of these community views is set forth in Appendix A of this ROD.

Thus, the FAA has determined that throughout the environmental process, beginning at its earliest planning stages, fair consideration was given to the interest of communities in or near the project location.

C. The State of Illinois has certified in writing that there is reasonable assurance that the project will be located, designed, constructed and operated in compliance with applicable air and water quality standards (49 U.S.C. Section 47106 (c)(1)(B)).

The determination prescribed by this statutory provision is a precondition only to agency approval of airport development project funding applications involving a new airport location, a new runway location or a major runway extension. The Proposed Projects evaluated in this EA do not meet these criteria and are not required to have such certification in writing. However, the Illinois Environmental Protection Agency has reviewed this EA, and by letter, dated January 15, 2002, has provided comments on the document that the Proposed Projects will be located, designed, constructed and operated in compliance with applicable air and water quality standards. Based on the response to comments provided by the City of Chicago in the Final EA, the City appears to be able to meet all applicable air and water quality standards.

Therefore, the FAA concludes that the Proposed Projects evaluated in the EA will be located, designed, constructed, and operated so as to comply with applicable air and water quality standards.

D. Effect on Natural Resources (49 U.S.C. Section 47106 (c)(1)(C)).

The determination prescribed by this statutory provision is a precondition only to agency approval of airport development project funding applications involving a new airport location, a new runway location or a major runway extension. It allows approval in those cases where it is found such development to have a significant adverse effect on natural resources, including fish and wildlife, natural, scenic, and recreation assets, water and air quality, or another factor affecting the environment, only after finding that no possible and prudent alternative to the project exist and that every reasonable step has been taken to minimize the adverse effect. The Proposed Projects evaluated in this EA are not required to have such a finding. The FAA further finds that the Proposed Projects will not have a significant adverse effect on natural resources, after determining that no possible and prudent alternative to the Proposed Projects exists. Nevertheless, the FAA has also determined that all reasonable steps have been taken to minimize any adverse effects on natural resources through mitigation.

E. Appropriate action, including the adoption of zoning laws, has been or will be taken to the extent reasonable to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations (49 U.S.C. Section 47107(a)(10)).

The sponsor assurance prescribed by this statutory provision is a precondition to agency approval of airport development project funding applications. In addition to the actions described in Section A in this chapter of the ROD, the City of Chicago has worked extensively with local jurisdictions to develop and implement plans and policies to ensure compatible land use in the airport vicinity.

Section 5.2 of the EA describes the current status of zoning and land use planning for lands near the airport. The airport has an existing local noise compatibility program designed to either reduce noise at the source or mitigate the noise received by sensitive land uses in the airport vicinity. As explained in the EA, the development of the Proposed Projects will not result in any increased significant impacts on non-compatible land uses.

The FAA requires satisfactory assurances, in writing, that appropriate action, including the adoption of zoning laws, has been or will be taken to restrict, to the extent reasonable, the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft.

Based upon the administrative record for this ROD, the FAA has concluded that existing and planned noise reduction programs at O'Hare provide for appropriate action to ensure compatible land use in the airport vicinity.

F. Clean Air Act, Section 176 (c) (1) Conformity Determination Regarding Chicago O'Hare International Airport Master Plan Update Development Actions (42 U.S.C. Section 7506 (c)).

The determination prescribed by this statutory provision is a precondition for Federal Agency support or approval of airport development projects. The USEPA regulations generally governing the conformity determination process are found at 40 CFR Part 93, Subpart B, Sections 93.154 through 93.159, 40 CFR Part 50, and 40 CFR Part 51, Appendix W.

Because O'Hare is located in Cook and DuPage Counties, which have been designated as part of a non-attainment area for ozone (O₃), the FAA has determined that the Proposed Projects would be consistent with the purpose of the Illinois SIP and not cause or contribute to any new violations of the NAAQS in the project area or the metropolitan area. The air quality analysis conducted for the EA indicated that the estimated air emissions caused by the Proposed Projects would be de minimis under 40 CFR Part 93 Subpart B and would result in ambient pollutant concentration levels less than the NAAQS as prescribed under 40 CFR Part 50 and adopted by reference as the Illinois Ambient Air Quality Standards (AAQS). The EA showed that the Proposed Projects would not increase the frequency or severity of any existing violations of any NAAQS and that the Proposed Projects would not delay timely attainment of the NAAQS or any required interim emission reduction in the project area as described in the Illinois State Implementation Plan. Appendix R of the EA presents the letter from the USEPA Region 5, dated January 17, 2002, which stated the agency reviewed the Draft EA pursuant to Section 309 of the Clean Air Act and provided detailed comments on the federal approval of the EA and the environmental impacts associated with implementation of the Proposed Projects.

Based upon the air quality analysis in the EA and its appendices and supporting material in the administrative record, the FAA concludes that the Proposed Projects are

de minimis under Section 176(c)(1) [42 USC 7506c] of the Clean Air Act Amendments of 1990, as implemented by 40 CFR Part 93, Subpart B.

G. For this project, involving new construction that will directly affect wetlands, there is no practicable alternative to such construction. The Proposed Action includes all practicable measures to minimize harm to wetlands that may result from such use (*Executive Order 11990, as amended*).

This executive order requires all Federal agencies to avoid providing assistance for new construction located in wetlands, unless there is no practicable alternative to such construction, and all practicable measures to minimize harm to wetlands are included in the action.

Section 5.12 of the EA documents that five of the Proposed Projects are expected to adversely affect eight wetland areas, either directly through draining and filling, or indirectly by changing the hydrology. These projects include the Lynxs Cargo Facility relocation, the Lee Street/Northwest Tollway Interchange, Balmoral Avenue Extension, Terminal 6 Apron, and the Mannheim Flyover. The wetland that would be adversely affected by the Terminal 6 Apron was filled as part of an emergency mosquito abatement program that entailed filling a number of isolated non-jurisdictional wetlands. Alternative locations for each project were evaluated in Chapter 3, Alternatives, of the EA. None of the other Proposed Projects are expected to have any adverse impact on wetlands.

The wetlands impacted by each project are listed in Table 5.12-1 in the EA. Five wetlands would be completely impacted: NE11, SE74, NW50, SE55, and NW2. Three others would be partially impacted: NE41, NE52, and NE53. The total wetland impact on these wetlands would be approximately 3.19 acres. The EA identifies that these are low quality wetlands.

The Lynxs Cargo Facility Relocation would impact two wetlands, NW50 and NW2, a total of 1.27 acres. These sites would be completely drained and filled by new construction. Because the Lynxs Cargo Facility requires a large area with both airside and landside access, as well as access to off-airport roadways, there is no practicable alternative to construction of this facility in this location. The Department of Aviation would design and construct the facility to avoid impacts to another adjacent wetland, NW36.

The proposed Lee Street/Northwest Tollway Interchange would impact one wetland. Wetland NE41 would be partially impacted by draining, filling, and developing a portion of its area as well as by changing the hydrology of the remaining wetland area through drainage modifications. The total impact area would be .13 acres. The Department of Aviation would use available design and construction methods, such as bridging or other alignment measures, and would create buffer zones between the wetland and the developed land, in order to minimize impacts. There is no practicable alternative to construction of the Lee Street/Northwest Tollway Interchange at this location. Any other alternative location or interchange configuration would raise safety concerns

related to traffic flow and congestion at this point. In addition, the presence of other wetlands in this area means that alternative locations would force the need to consider much more complicated and environmentally intrusive engineering solutions, or would restrict road access to the northeastern quadrant of the Airport.

Construction of the Balmoral Avenue Extension would impact one wetland, SE74, by draining, filling, and developing this wetland. The total impact on this wetland area would be 0.63 acres. The Balmoral Avenue Extension Project is proposed to connect with other existing roadways in the vicinity, providing access to the Airport from Rosemont and airport related facilities in this area, as well as relieving traffic congestion on I-190. There is no practicable alternative to construction of the Balmoral Avenue Extension, given these objectives and the placement of existing roadways in this area. When practicable, the Department of Aviation would use available design or construction techniques, such as bridging over wetland areas, in order to minimize wetland impacts. The decision about the practicability of a design or construction technique would depend on the feasibility of the action in terms of safety, transportation objectives, engineering environmental impacts, economics, and other factors.

The proposed Mannheim Flyover would impact three wetlands. Wetland NE11 would be completely impacted by placement of the roadway. Wetlands NE52 and NE53 would be partially impacted. The impact to wetlands NE52 and NE53 would result from draining, filling and developing a portion of these wetlands, and changing the hydrology of the remaining wetland areas through drainage modifications. The total impact area would be 0.8 acres. There is no practicable alternative to construction of the Mannheim Flyover, given the placement of existing roadways in this area. When practicable, the Department of Aviation would use available design and construction techniques, such as bridging over wetland areas, in order to minimize wetland impacts.

The Terminal 6 Apron construction would take place at the location of wetland SE55. The total impact is 0.36 acres. There is no practicable alternative to construction of the terminal apron in this location, given the size of apron necessary to support Terminal 6. In addition, maintaining this wetland in an area of active aircraft operations would result in unacceptable potential hazards to birds and aircraft.

As initially proposed, the Rental Car Storage and Maintenance Lot would have impacted three wetlands, NE58, NE60, and NE65. All three wetlands would have been completely drained, filled, and developed with a total impact area of 3.24 acres. However, the Department of Aviation will design and construct the Rental Car Storage and Maintenance Lot to avoid impact to all of the wetlands, which are located on the edges of the proposed site.

There is no reasonable or practicable alternative to constructing the Proposed Projects at O'Hare resulting in these wetland impacts given the purpose and need for the Proposed Projects, consideration of environmental and economic factors, and land use issues, as shown in Chapter 3 and Section 5.12 of the EA.

Finding of No Significant Impact / Record of Decision

Furthermore, because the affected wetlands are hydrologically isolated, they do not perform significant flood or storm water storage functions or provide significant water quality benefits. Moreover, two of their functions, floodwater attenuation and floodwater storage, would be fully mitigated by the construction of the on-airport detention basins. Additional wetland functions for these wetlands will be mitigated as part of the overall wetlands mitigation program.

The Proposed Projects use 3.19 acres of wetlands located on the airport. This is due to the Proposed Projects location being determined by the only feasible and prudent location for siting at the airport. There is very limited space available overall in which to accomplish airport improvements.

Considering these and other reasons described more fully in Chapter 3 of the EA, and taking into consideration cost, and in light of the overall purpose of the Proposed Projects, the FAA finds that there is no practicable alternative to the wetland loss associated with the Proposed Projects.

As noted in Section 5.12 of the EA, the USCOE has worked with the City of Chicago and FAA to ensure that all practicable measures will be taken to minimize harm to wetlands impacted through development of the Proposed Projects. This will be accomplished by using BMPs during construction and purchasing credits in a wetland mitigation bank. Following issuance of this ROD, the USCOE, in consultation with the IEPA, will complete its processing of a Section 404 permit and Section 401 certification required for the City of Chicago to proceed with development impacting wetlands. The project approvals in this ROD and this wetlands determination are expressly conditioned upon permit approval and conditions to be outlined by the USCOE, and upon the City of Chicago accomplishing the wetlands mitigation measures identified in the EA and any USCOE permit approval.

It is generally preferable to attempt to mitigate wetland loss through replacement wetlands in the same watershed; this is not the case where such replacement would create man-made wetlands in the vicinity of airport aircraft movement areas. FAA Advisory Circular 150/5300-33, dated May 1, 1997, states the FAA's policy that wetland mitigation projects located within 10,000 feet of airports serving turbine-powered aircraft (such as O'Hare), present a safety hazard as attractants of wildlife that significantly increase the risk of bird/aircraft strikes.

The safety standards set forth in this FAA policy statement are recommended for the operators of all public-use airports. Furthermore, for airport sponsors who are the recipients of Federal grant funding, adherence to safety standards set forth in FAA advisory circulars is a requirement of standard grant assurance #34, as acknowledged in paragraph 4-6.a. of Advisory Circular 150/5200-33.

This recent agency policy guidance supports the EA determination that the replacement wetlands for the Chicago O'Hare development actions should not be located in the vicinity of the airport. Given the potential hazard associated with the creation of wildlife attractions within 10,000 feet of jet runways, the FAA, USCOE, and

IEPA agreed that it is prudent to permit the City of Chicago to replace these impacted wetlands outside of the airport's immediate watershed but within the Des Plaines River watershed.

As detailed in Section 6.2 of the EA, a wetland mitigation program has been developed to offset the impacts of the Proposed Projects and to recognize other long-term biological problems. The mitigation plan calls for replacing the filled wetlands with credits purchased from a wetland mitigation bank within the Des Plaines River watershed. Final mitigation requirements will be determined during the Section 404 permit application and review process in consultation with the USCOE.

H. For this project, involving an encroachment on a floodplain, there is no practicable alternative to the selected development of the preferred alternative. The Proposed Action conforms to all applicable state and/or local floodplain protection standards (*Executive Order 11988*).

This executive order, together with the applicable DOT order, establish a policy to avoid supporting construction within a 100-year floodplain where practicable, and where avoidance is not practicable, to ensure that the construction design minimizes potential harm to or within the floodplain.

Section 5.13 of the EA explains that no Proposed Projects are within the 100-year floodplain in the Crystal Creek or Bensenville Ditch watersheds. This included all projects in the terminal area, including the Terminal 3 modifications, new Terminals 4 and 6 and the Terminal 2 reconstruction. On the other hand, four of the Proposed Projects (Lynxs Cargo Facility Relocation, the Eastside Collateral Development, Bessie Coleman Drive Realignment and the Lee Street/Northwest Tollway Interchange) are located within the current 100-year floodplain on the North Airfield in the Willow-Higgins Creek watershed. However, the construction of the new detention basin system will remove the Eastside Collateral Development and the Bessie Coleman Drive Realignment from the post-construction floodplain.

As shown in the EA and explained in the "Alternatives" discussion in Chapter 5 of this ROD, there is no practicable alternative to the selected alternatives. Development of these Proposed Projects achieves the purposes and needs for the projects in the most cost-effective manner with the least impact on the surrounding land uses. This program has been designed to comply with applicable requirements of the permitting agencies, with which the FAA and the City of Chicago have been coordinating, in order to ensure that the construction design minimizes potential harm to or within the floodplain. Each of these agencies has agreed with the mitigation plan in concept, and coordination will continue throughout the permitting process.

I. Relocation Assistance (*42 U.S.C. Section 4601 et seq.*).

These statutory provisions, imposed by Title II of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, require that state or local agencies, undertaking Federally-assisted projects which cause the involuntarily displacement of

persons or businesses, must make relocation benefits available to those persons impacted.

As detailed in Section 5.3 of the EA, Social Impacts, the construction activities associated with the proposed World Gateway Program, World Gateway Enabling Projects and Independent Utility Projects would all be located entirely on Airport-owned or controlled property, with the exception of roadway projects, which would be located within public rights-of-way. No off-Airport property acquisition would be required. Thus, the Proposed Projects would not require the relocation of residences. However, three existing on-Airport businesses would be relocated with the World Gateway Program:

- Sky Chefs Flight Kitchen
- Lynxs Cargo Facility
- Delta Cargo Facility

The FAA will require the City of Chicago to provide fair and reasonable relocation payments and assistance payments pursuant to the provision of the Uniform Relocation Assistance and Real Property Acquisition Policies Act. The Airport proposes to cover the moving expenses and construction costs for the replacement facilities. The square footage of the new structures usable by the tenants would be equal to the current structures, with the exception of the new Sky Chefs Flight Kitchen, which would be larger. Sky Chefs would pay for the additional square footage it desires for its new structure. No down time would be experienced by these businesses during the construction and moving process.

J. For any use of lands with significant historic sites, there is no prudent and feasible alternative to using the land; the project includes all possible planning to minimize harm resulting from the use (49 U.S.C. Section 303 (c)).

The Proposed Projects would not have a significant adverse affect upon and result in the use or constructive use of any historic properties protected under 49 U.S.C. Section 303(c) commonly known as Section 4(f) of the Department of Transportation Act. In a letter dated November 21, 2001, the Illinois Historic Preservation Office indicated that, "We have reviewed the documentation submitted for the referenced project(s) [*Draft Environmental Assessment for the Chicago O'Hare International Airport World Gateway Program and Other Capital Improvements*] in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We therefore have no objection to the undertaking proceeding as planned."

K. There are no disproportionately high or adverse human health or environmental effects from the project on minority or low-income populations (*Executive Order 12898*).

Environmental justice concerns were addressed in Section 5.23, Environmental Justice, of the EA relative to the Proposed Projects. The analyses of each environmental impact category considered in Chapter 5, Environmental Consequences, of the EA found that no significant adverse impacts would be created with the Proposed Projects. These analyses have revealed, however, the potential for minor impacts on Airport property and certain properties immediately adjoining Airport property. These are all potential minor noise impacts in Census Tract 7707 in Rosemont from new development on the Airport. As shown in Tables 5.23-1 and 5.23-2 of the EA, Census Tract 7707 has only small proportions of minority and low-income populations. Thus, the Proposed Projects are not anticipated to have any disproportionate and adverse impacts on minority and low-income populations.

L. The FAA has given this proposal the independent and objective evaluation required by the Council on Environmental Quality (*40 C.F.R. Section 1506.5*).

As the EA outlined, a lengthy process led to the ultimate identification of the selected alternatives, disclosure of potential impacts, and selection of appropriate mitigation measures. This process began with the FAA's competitive selection of an independent EA review contractor, continuing throughout the preparation of the Draft EA and Final EA by the City of Chicago, and culminating in this FONSI/ROD prepared by the Federal Aviation Administration. The FAA and its contractors provided input, advice, and expertise throughout the planning and technical analysis. The FAA also provided direction and legal review of the project. From its inception, the FAA has taken a strong leadership role in the environmental evaluation of this project and has maintained its objectivity.

11. FAA APPROVALS AND ORDER

Having determined that the agency's preferred alternatives, the Proposed Projects, are the only possible, prudent, and practicable alternatives, the remaining decision is whether to approve or not approve the agency actions necessary for implementation of the Proposed Projects. Approval would signify that applicable Federal requirements relating to airport development planning have been met, and would permit the City of Chicago to proceed with the proposed development and possibly receive Federal funding for eligible items. Not approving these actions would prevent the City of Chicago from proceeding with federally supported development in a timely way.

I have carefully considered the FAA's goals and objectives in relation to various aeronautical aspects of the proposed development actions discussed in the EA. These include the purposes and needs to be served by the Proposed Projects, the alternative means of achieving them, the environmental impacts of these alternatives, the mitigation necessary to preserve and enhance the environment, and the costs and benefits of achieving these purposes and needs in terms of effective and fiscally responsible expenditure of Federal funds. I have also considered comments received by the FAA on the social, environmental, and economic impacts of the Proposed Projects.

The undersigned finds that the proposed federal actions are consistent with existing national environmental policies and objectives as set forth in Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and that they will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(C) of NEPA.

Therefore, under the authority delegated to me by the Administrator of the FAA, I find that the Proposed Projects in the ROD are reasonably supported and approved. For those projects, I therefore, direct that action be taken to carry out the agency actions discussed more fully in Chapter 3 of this ROD, including:

- Unconditional approval of the Proposed Projects as depicted on the revised ALP, based on determinations through the aeronautical study process regarding obstructions to navigable airspace, and no FAA objection to the airport development proposal from an airspace perspective (49 U.S.C. Section 40103, Section 40113, Section 47107 (a)(16)).
- Federal environmental approval for the City of Chicago to establish eligibility to participate in funding through use of Federal AIP funds or PFCs for eligible projects, assuming the independent requirements of these programs are met (49 U.S.C. Section 47101 *et seq.*, 49 U.S.C. Section 40117).
- FAA review and issuance of findings on requests for conversion of airport property, "federally obligated land," for the non-aviation related development that is part of the Proposed Project. Airport land becomes federally obligated when

Finding of No Significant Impact / Record of Decision

an airport owner accepts FAA grants. Before conversion of airport property for non-aviation use, FAA must grant a land release. This federal environmental approval enables the FAA to approve the release of federally obligated land for non-aviation related projects. The FAA must review and issue a finding on any request for the conversion of airport property for non-aviation use. (49 U.S.C. Section 47107, Section 47125.)

Finally, based upon the administrative record of this project, I certify, as prescribed by 49 U.S.C. 44502 (b), that implementation of the Proposed Projects is reasonably necessary for use in air commerce.

Concurrence of Responsible Federal Official:



Prescott C. Snyder
Airports Environmental Program Manager
Chicago Airports District Office

6/21/02
Date

Approved:



Philip M. Smithmeyer
Manager, Chicago Airports District Office

6/21/02
Date

RIGHT OF APPEAL

This decision constitutes the Federal approval for the actions identified above and any subsequent actions approving a grant of Federal funds to the City of Chicago. Today's action is taken pursuant to 49 U.S.C. Subtitle VII, Parts A and B, and constitutes a final order of the Administrator subject to review by the Courts of Appeals of the United States in accordance with the provisions of 49 U.S.C. Section 46110.

LIST OF ABBREVIATIONS AND ACRONYMS

AAQS	Ambient Air Quality Standards
ACHP	Advisory Council on Historic Preservation
ALP	Airport Layout Plan
APU	Auxiliary Power Unit
AReCO	Alliance of Residents Concerning O'Hare
ATS	Airport Transit System
BMP	Best Management Practice
CATS	Chicago Area Transportation Study
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CTA	Chicago Transit Authority
Draft EA	Draft Environmental Assessment
DNL	Day-Night Average Sound Level
DOD	Department of Defense
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPS	Elevated Parking Structure
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FICON	Federal Interagency Committee on Noise
Final EA	Final Environmental Assessment
FHWA	Federal Highway Administration
FIS	Federal Inspection Services
FONSI	Finding of No Significant Impact
GARB	General Airport Revenue Bond
GSE	Ground Support Equipment
H&R	Heating and Refrigeration
IDOT	Illinois Department of Transportation
IEPA	Illinois Environmental Protection Act
ISTHA	Illinois State Toll Highway Authority
METRA	Metropolitan Rail Corporation (Chicago Commuter Rail)
MPO	Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NIPC	Northeastern Illinois Planning Commission
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	Ozone
PFC	Passenger Facility Charges
PL	Public Law

Finding of No Significant Impact / Record of Decision

PM10	Particulate Matter (10 microns or less in diameter)
ROD	Record of Decision
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SOC	Suburban O'Hare Commission
TAF	Terminal Area Forecast
U.S.C.	U.S. Code
USCAWA	U.S. Citizens Aviation Watch Association
USCOE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound

GLOSSARY OF TERMS

Aircraft Operations - The total number of movements in landings (arrivals) plus takeoffs (departures) from an airport.

Airport Layout Plan - An airport layout plan (ALP) is a scaled drawing of existing and proposed land and facilities necessary for the operation and development of the airport. Any airport will benefit from a carefully developed plan that reflects current FAA design standards and planning criteria. The ALP shows boundaries and proposed additions to all areas owned or controlled by the sponsor for airport purposes, the location and nature of existing and proposed airport facilities and structures, and the location on the airport of existing and proposed non-aviation areas and improvements thereon.

Best Management Practices - Methods employed during construction and included in the development for ensuring environmental management to the greatest possible extent.

Commuter Aircraft - Commuters are those carriers that provide regularly scheduled passenger or cargo service on aircraft seating fewer than 66 passengers or holding cargo with 18,000 pounds of payload or less. A typical commuter flight operates over a trip distance of 100 to 300 miles and is flown at lower altitudes than those operated by the long-haul carriers.

Connecting Passenger - An airline passenger who transfers from an arriving aircraft to a departing aircraft at a hub airport in order to reach their ultimate destination.

Delay - The difference, in minutes, between the scheduled time and actual time of an aircraft arrival or departure. For airport planning purposes, it is often expressed as an annual average.

Enplanements - Domestic, territorial, and international revenue passenger boarding passengers in scheduled and nonscheduled service of aircraft in intrastate, interstate, and foreign commerce.

Environmental Assessment (EA) - An environmental assessment is a concise document that assesses the environmental impacts of a proposed Federal action. This document discusses the need for, and environmental impacts of, the Proposed Action and alternatives. A listing of agencies and persons consulted is also included. An environmental assessment should provide sufficient evidence and analysis for a Federal determination of whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

Environmental Impact Statement (EIS) - An EIS is a document that provides a discussion of the significant environmental impacts which would occur as a result of a proposed project, and informs decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts. Public participation and

Finding of No Significant Impact / Record of Decision

consultation with other Federal, state, and local agencies is a cornerstone of the EIS process.

Federal Aviation Administration (FAA) - The FAA constructs, operates, and maintains the National Airspace System and the facilities which are a part of the system; allocates and regulates the use of the airspace; ensures adequate separation between aircraft operating in controlled airspace; and through research and development programs, provides new systems and equipment to improve utilization of the nation's airspace.

Finding of No Significant Impact - Following the preparation of an environmental assessment, the Federal Agency determines whether to prepare an EIS or FONSI. If the Proposed Projects are determined not to result in any significant environmental impact, a finding (FONSI) is made by the Federal Agency.

Hub - An airport that serves airlines that have hubbing operations.

Hubbing - A method of airline scheduling that times the arrival and departure of several aircraft in a close period of time in order to allow the transfer of passengers between different flights of the same airline in order to reach their ultimate destination. Several airlines may conduct hubbing operations at an airport.

Land Use Compatibility - The ability of land uses surrounding the airport to coexist with airport-related activities with minimum conflict.

Local Passenger - A passenger who either enters or exits a metropolitan area on flights served by the area's airport, the opposite of a connecting passenger.

Mitigation Measure - An action taken to alleviate negative impacts.

Master Plan - A comprehensive plan to guide the long-term physical development of an airport.

NEPA - The National Environmental Policy Act of 1969 (NEPA) is the original legislation establishing the environmental review process.

Noise - Noise is defined as unwanted sound. Whether a sound is considered noise is based on human perception.

Noise Contour Map - A map representing average annual noise levels summarized by lines connecting points of equal noise exposure.

Record of Decision - the official documentation of a decision on a federal action that identifies the basis for the decision.

Finding of No Significant Impact / Record of Decision

Runway - A defined rectangular area on an airport prepared for the landing and takeoff run of aircraft along its length. Runways are normally numbered in relation to their magnetic direction rounded off to the nearest 10 degrees, e.g., Runway 14, Runway 32.

Section 106 of the National Historic Preservation Act (Section 106) - Governs the identification, evaluation, and protection of historical and archeological resources affected by state and Federal transportation projects. Principal areas identified include required evaluations to determine the presence or absence of site, the eligibility based on National Register of Historic Places criteria, and the significance and effect of a proposed project upon such a site.

Section 401 of the Clean Water Act (Section 401) - The State Water Quality Certification program requires that states certify compliance of federal permits or licenses with state water quality requirements and other applicable state laws. Under Section 401, states have authority to review any federal permit or license that may result in a discharge to wetlands and other waters under state jurisdiction, to ensure that the actions would be consistent with the state's water quality requirements.

Section 404 of the Clean Water Act (Section 404) - authorizes the U.S. Army Corps of Engineers (USCOE) to issue permits regulating the discharge of dredged or fill material into the waters of the United States, including wetlands.

Taxiway - A defined path established for the taxiing of aircraft from one part of an airport to another.

Terminal Area Forecast (TAF) – The Terminal Area Forecast (TAF) contains historical and forecast data for enplanements, airport operations and instrument operations. The data covers the 315 FAA towered airports, 128 Federal contract tower airports, 175 radar approach control facilities, and 2,962 non-FAA airports. Data in the TAF is presented on a U.S. Government fiscal year basis (October through September). The TAF is prepared to assist the FAA in meeting its planning, budget, and staffing requirements. In addition, many state aviation authorities and other aviation planners use the TAF as a basis for planning future airport improvements.

APPENDIX A

REGULATORY AGENCIES' REVIEWS

The Draft EA was sent to a number of regulatory agencies for review and comment. Following is a general summary of review comments received on the Draft EA from the regulatory agencies that sent comment letters to the City of Chicago for consideration. Appendices R and S of the EA provide the specific comments and more detailed responses to each of the concerns expressed by these agencies. A summary of significant comments is set forth below in bold and responses are made in regular text.

U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (USEPA) reviewed the Draft EA and submitted comments in a letter to the City of Chicago on January 17, 2002. The USEPA indicated that the purpose and need for the World Gateway Program was adequately addressed in the EA and concurred that the need for the improvements has been "demonstrated as an independent need that does not depend on or foreclose the option of other delay reduction measures." The USEPA also requested continued coordination on this project, including a copy of the Finding of No Significant Impact, if issued. This Finding of No Significant Impact/Record of Decision, in addition to the Final EA, will be forwarded to the USEPA.

The following issues, summarized below, were identified by the USEPA in an attachment to their review letter.

Federal Approval of EA

USEPA stated that it was unclear in the Draft EA whether the document was a City of Chicago document or if it was a Federal EA.

The Draft EA was a City of Chicago document. However, the Final EA becomes a Federal document upon acceptance. To address this issue, the EA was revised to include a statement that the EA, "...becomes a Federal document if and when accepted and signed by the Federal Aviation Administration (FAA) after thorough review." The Final EA became a Federal document when it was signed by the FAA Responsible Federal Official.

Wetland Impacts and Mitigation for unavoidable losses

USEPA had several concerns regarding the cumulative impacts analysis as it relates to wetland impacts. They indicated that it was not clear if all aviation and non-aviation projects within the cumulative impact analysis have undergone

NEPA analysis yet, and if so, when construction will begin on those projects. Further, USEPA indicated that the EA should have discussed existing efforts to mitigate wetland impacts from other projects that were evaluated in the cumulative impacts analysis.

Section 5.12.2 of the Final EA has been revised to clarify the environmental review status of the projects discussed in the cumulative impact analysis. Dates of the respective environmental assessments associated with these projects are provided in the footnotes to Section 5.12.2 of the EA. The anticipated dates for implementation of the various projects are identified in Appendix S, Response to Comments, Response I-8.

The Airport has committed to mitigate any adverse impacts to jurisdictional and non-jurisdictional wetlands either with offsite creation of wetlands, enhancement of existing wetlands, or through purchase of credits in an existing wetland mitigation bank. The total amount of committed compensatory mitigation (planned and/or implemented), for the Proposed Projects and all of the cumulative projects identified in Section 5.12.2 is 35.925 acres. Sections 5.12.2 and 5.12.4 in the Final EA and Appendix S, Response I-9 describes the specific wetland mitigation efforts for each project and the commitments made by the City of Chicago, including existing mitigation efforts.

Air Toxics

The USEPA indicated that the discussion of air toxics in the EA was appropriate and there is little else that they would recommend in predicting air toxics impacts from aircraft and airport operations at this time. USEPA also recommended that language in Section 5.6.11 be revised to not over-generalize that all air toxics are a “subset” of VOCs and PM₁₀.

Language in the EA was revised in Section 5.6.11 (last sentence, first paragraph) to more accurately state that, “Many air toxics-such as benzene, 1,3-butadiene, formaldehyde, acrolein and various polycyclic aromatic hydrocarbons (“PAHs”) – are included in VOC and particulate emissions categories.”

Construction Related Impacts and Mitigation

USEPA is concerned about diesel emissions associated with construction related activities. The USEPA has labeled diesel particulate a probable human carcinogen.

Section 5.6 of the Final EA discusses concerns associated with diesel particulates and evaluates the impact of the Proposed Projects on this pollutant. Section 5.6 of the EA discusses the beneficial effects that efforts to encourage use of alternative-fuel vehicles will have on diesel particulate emissions at the Airport. In addition, in response to the suggestion from USEPA, the Airport has confirmed its intent, where feasible, to promote use of lower-emission construction equipment as an element of the Proposed Projects.

Section 5.6 of the Final EA has been changed to reflect the City's commitment to use construction equipment that is either retrofitted or compliant with the emission standards listed in 40 CFR Part 89 – Control of Emissions from New and In-Use Nonroad Engines to the extent possible.

Illinois Environmental Protection Agency

The Illinois Environmental Protection Agency (IEPA) reviewed the Draft EA and submitted comments in a letter to the City of Chicago on January 15, 2002. The following issues, summarized below, were identified by the IEPA in their review letter.

Air Quality

IEPA encourages the implementation of all emission reduction measures to realize the emission reductions for all pollutants described in the EA.

IEPA indicated that construction activity relating to noise, dust, and disposal of waste materials must also comply with all applicable rules and regulations, including obtaining all necessary IEPA permits and permit modifications for all new and relocated facilities.

Further, the IEPA indicated that the proposed roadway improvement projects must be contained in the region's conforming long-range plan and near term transportation improvement program in accordance with federal transportation conformity regulations.

The City of Chicago has committed to the implementation of emission reduction measures described in the EA and will obtain all necessary IEPA permits for the Proposed Projects. In addition, Section 5.6 of the EA has been revised to address the federal transportation conformity regulations.

Waste and Land Pollution Issues

The IEPA indicated that the Department of Agriculture considers waste associated with the addition of international flights to new terminals as "international waste" since these wastes could inadvertently be combined with domestic waste. Therefore this waste requires incineration ("sterilization").

Section 5.20.1.2 of the EA has been revised to indicate that all international wastes and all wastes consisting of a mixture of domestic and international solid waste will be handled as international waste and treated as required by federal regulation prior to its disposal.

The IEPA also requested additional language in the EA related to compliance with applicable rules and regulations regarding possible cleanups of relocated

facilities. In addition, the IEPA indicated that potential contamination of existing sites and installation and/or removal of fuel storage tanks must comply with applicable local and state rules and regulations.

The Department of Aviation has committed to complying with all applicable state and federal regulations governing the removal, remediation, and cleanup of relocated facilities undertaken as part of the World Gateway Program. In addition, the Department of Aviation will obtain the applicable permits required to conduct such construction-related activities.

Water Quality and Wetlands Issues

The Bureau of Water, Watershed Management Section staff of the IEPA reviewed the Draft EA with respect to Section 401 Water Quality Certification and had the following comments:

The IEPA had questions regarding the potential use of bridging techniques mentioned in the Draft EA to minimize wetland impacts.

During the design phase, the use of bridges and other structures will be reviewed, where practical, to ensure that project impacts are minimized. Bridging consists of raising or elevating a proposed structure so that it passes over the wetland rather than requiring placement of fill and regrading to support the structure.

IEPA also requested additional discussion of the proposed plan if the Structure 140 and Touhy Detention Basins are not completed prior to the proposed improvements.

Sections 5.13.1 and Section 5.21 of the Draft EA have been revised to indicate that the Touhy Avenue Detention Basin and Structure 140 are scheduled to be operational by the time that construction begins on the Lee Street/Northwest Tollway Interchange and the Eastside Collateral Development in the fourth quarter of 2004. Construction of the relocated Lynxs Cargo Facility may begin in late 2002 before both the Touhy Avenue Detention Basin and Structure 140 have been substantially completed, meaning that as much as 3.4 acres of floodplain could be encroached upon prior to the full implementation of both detention facilities. Construction of relocated Bessie Coleman Drive is scheduled to be completed by the end of 2002. The Bessie Coleman Drive Relocation could encroach upon as much as 1.6 acres of floodplain if the Touhy Avenue Detention Basin and Structure 140 are not in full operation. Therefore, to address these temporary floodplain impacts, the Airport will provide 7.5 acres of temporary flood storage through construction and use of temporary detention basins until the Touhy Avenue Detention Basin and Structure 140 are fully operational. The temporary detention basins will be included in the design of these Proposed Projects if needed.

More detail on the proposed bridge across Willow Creek for a taxiway was also requested.

Section 5.13.1.1 of the Draft EA has been revised to indicate that the taxiway bridge over Willow Creek is required to provide access to the Lynxs Cargo Relocation site and minimize impacts to the floodplain along Willow Creek. The taxiway bridge will not cause additional wetland impacts. Conceptual drainage studies have been performed to determine the location, size, and orientation of the structure to determine the creek and floodplain impacts described in the EA. Further design development required to determine the actual bridge design will be continued as part of the design phase for the Proposed Projects.

Further, a description of the best management practices (BMPs) to be used during construction was requested.

Sections 5.13.1.2 and 5.7.3 of the EA have been revised to include additional information about the City's current BMPs for stormwater runoff during construction activities.

Regarding water quality issues, the IEPA requested several text changes or clarifications in Chapter 4 of the EA.

Various text changes were made to Chapter 4 of the EA to address the issues related to water quality and deicing as outlined in the Response to Comments G-11 through G-16 of Appendix S of the EA.

Northeastern Illinois Planning Commission

The Northeastern Illinois Planning Commission (NIPC) reviewed the Draft EA and at its December 20, 2001 quarterly meeting, approved a statement for transmittal to the City of Chicago Department of Transportation regarding the World Gateway Program Draft Environmental Assessment. The following issues and technical comments, summarized below, were identified by NIPC in their letter, dated December 26, 2001.

Overall, the Commission found the Draft EA to be in compliance with applicable rules and regulations for environmental documents. NIPC found the Draft EA to be generally consistent with NIPC's adopted policies, objectives, and guidelines.

NIPC recommended that the EA include a discussion of the potential disruption of airport operations during the construction of the Proposed Projects.

In order to provide the traveling public with information on any closures and temporary or permanent changes, the City and Department of Aviation has indicated that they will work with the contractor, airlines and other airport tenants and operators to institute a public information program. However, some disruption to current operations is

inevitable. In these instances, steps will be taken to provide advance notification, temporary facilities, or other types of assistance to minimize these impacts. General phasing of the projects is summarized in Exhibits 2-23 and 2-24 of the EA. This information can be used to determine general areas of the airport that could be disrupted during the construction period.

NIPC suggested that the EA would be greatly enhanced if measurements for improved efficiency and convenience were included.

Measurements of improved efficiency and convenience that would be provided by the World Gateway Program are included in Chapter 2 of the EA in Tables 2-1, 2-2 and 2-3 and are depicted in Exhibits 2-7 and 2-8.

NIPC indicated that the Best Management Practice requirements need to be clarified for stormwater runoff and construction site erosion. Further, NIPC recommends stormwater control be consistent with Model Stormwater Drainage and Detention Ordinance, adopted by Illinois EPA.

Section 5.13.1.2 and 5.7.3 of the EA have been revised to include additional information about the City's current BMPs for stormwater runoff and construction site erosion. Although the City of Chicago has not adopted the Model Stormwater Drainage and Detention Ordinance, as adopted by the Illinois Environmental Protection Agency (IEPA) in the Illinois Water Quality Management Plan, the City has adopted and implemented strategies to manage stormwater runoff at the Airport. To control the quantity and quality of stormwater runoff and runoff from construction activities, the Department of Aviation follows the best management practices (BMPs) for stormwater recommended under the Sewer Permit Ordinance of the Metropolitan Water Reclamation District of Greater Chicago (MWRD). The MWRD Ordinance includes stormwater detention methods to reduce excessive runoff during major storm events, such as provision of landscaped buffers in developed areas, and construction of stormwater detention basins. These methods must reduce site runoff to a release rate less than or equal to the natural carrying capacity of the receiving channels and other conduits, based on a three-year storm event. The MWRD ordinance uses a release rate for the three-year storm event of 0.15 cfs/acre, except where it can be shown that the natural discharge rate is greater. There is no release rate for the two-year storm event. Detention basin capacity must be able to handle runoff from a 100-year storm event, after accounting for discharge to the sewer system at the approved release rate. The MWRD requirements are designed to minimize the release of uncontrolled stormwater discharges and pollutants to the storm sewer system, as recommended by the Northeastern Illinois Planning Commission (NIPC).

NIPC also indicated that the EA should spell out erosion control policies more thoroughly. NIPC recommends Model Soil Erosion and Sediment Erosion Control Ordinance, adopted by Illinois EPA.

Sections 5.7.3 and 5.21.3.5 of the EA have been revised to reflect the following:

Finding of No Significant Impact / Record of Decision

In addition to implementing erosion control measures during construction that may include soil wetting, installation and maintenance of silt fencing, covering of piles of excavated materials, and use of hay bales, the Department of Aviation will consider the appropriate phasing of clearing and grading operations to minimize impacts on water quality. Although the City of Chicago has not adopted the NIPC Model Stormwater Drainage and Detention Ordinance, the Department of Aviation is in the process of reviewing its BMP Manual and intends to revise the manual to include airport-specific provisions for management of conventional and construction-related runoff. During this review and revision process, the City will consider elements of this model ordinance for inclusion in its new BMP Manual.

NIPC recommends that stormwater storage resulting from wetland impacts be replaced in the Des Plaines River watershed.

Options for compensatory wetland mitigation within the Des Plaines watershed will be considered. Appropriate wetland mitigation may, however, necessitate the use of mitigation sites located elsewhere if adequate mitigation opportunities are not available within the Des Plaines watershed. Mitigation for non-isolated wetlands will involve consultation with other federal agencies with jurisdiction and/or expertise over such wetlands, including the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency. Section 5.12.4 of the EA states that the Department of Aviation will mitigate impacts to jurisdictional wetlands at a ratio of 1.5:1 through purchase of off-site wetland acreage. The Department of Aviation will mitigate impacts to isolated, non-jurisdictional wetlands at a similar ratio in consultation with the Federal Aviation Administration. Mitigation will take place as impacts to wetlands occur.

NIPC recommends that proposed floodplain modifications conform to NIPC Model Floodplain Ordinance. The EA indicates that several projects will directly impact on regulatory floodplains. It recommends a compensatory fill replacement ratio of 1.5 to 1. This compensation ratio is consistent with NIPC recommendations.

The Department of Aviation will comply with City of Chicago and MWRD requirements and the requirements recommended in FAA Order 5050.4A for mitigation of impacts caused by construction within the floodplains. The City of Chicago, Department of Environment also has adopted a policy of requiring providing compensatory storage at a ratio of 1.5:1. Together, these policies and requirements provide protection of beneficial floodplain values similar to the IDNR/NIPC Model Floodplain Ordinance. Additionally, the Department of Aviation will consider any elements that are determined to be consistent with other applicable floodplain requirements during the design phase of World Gateway Program for any proposed facilities that will be located within the floodplain.

Metropolitan Water Reclamation District of Greater Chicago

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) reviewed the Draft EA and found that there is no apparent interference with District facilities. The following comments, summarized below, were identified by the MWRD in their review letter to the City on November 27, 2001.

The MWRD requested that as the City proceeds with any of the Proposed Projects, they should remain cognizant of existing and proposed MWRD facilities and projects. The projects may affect the proposed intercepting sewer 20C project. The MWRD believes that cooperation between the District and the City of Chicago on the construction of the Willow-Higgins Creek Reservoir and the upcoming Touhy Avenue Reservoir will be essential in helping to alleviate runoff problems. MWRD requests to remain informed as the World Gateway Program develops.

Section 5.7 of the EA has been revised to state that the Airport will review its plans for the design and construction of the Proposed Projects to ensure that this work does not adversely affect any MWRD facilities, or MWRD's planned extension to interceptor sewer 20C. The City of Chicago has committed to coordinate with MWRD and other state and local regulatory agencies regarding any element of the Proposed Projects that may affect MWRD.

Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) has reviewed the Draft EA and provided the following comments, summarized below, in a review letter to the City on December 10, 2001.

FEMA indicated that compliance with Executive Order 11988, Floodplain Management, must be assured. Practicable floodplain alternatives must be fully analyzed.

Section 5.13 of the EA describes the analysis of potential impacts to floodplains caused by the Proposed Projects, as well as the basis for the determination that there are no practicable alternatives that would avoid impacts to the 100-year floodplain. The analysis follows the FAA's guidance for preparation of environmental assessments in compliance with the National Environmental Policy Act (NEPA), as set forth in the Airport Environmental Handbook, FAA Order 5050.4A. Paragraph 47(e)(12) of the FAA Order implements Executive Order 11988 as well as DOT Order 5650.2, and establishes requirements that parallel the Federal Emergency Management Agency (FEMA) regulations at 44 CFR Part 9. The FAA Order covers the same substantive areas as the FEMA regulations. Section 5.13 of the EA also documents the City's compliance with these requirements by describing the impacts of the Proposed Projects, potential alternative actions to avoid floodplain impacts, and minimization and mitigation measures of unavoidable impacts.

In Section 4.8.1, Regulatory Information, of the Draft EA, the first sentence is incorrect. FEMA has not delegated authority to delineate floodplain to the State of Illinois....Please note the agency that has the authority is the Illinois Department of Natural Resources, Office of Water Resources (IDNR-OWR)....Additional changes are as follows: Change the 4th and 5th lines to read: "development within the floodway, and through an administrative process, concurs with the latest FEMA map revisions."...Change the 6th line to read: "IDNR-OWR criteria for floodway delineation..."

Section 4.8.1 of the EA has been revised to make the requested corrections to the text clarifying FEMA and State of Illinois authority over floodplain mapping.

FEMA requested that the EA specifically state how impacts to floodplains will be mitigated if Touhy Detention Basin and Structure 140 are not fully operational before project is built.

Sections 5.13.1 and Section 5.21 of the Draft EA have been revised to indicate that the Touhy Avenue Detention Basin and Structure 140 are scheduled to be operational by the time that construction begins on the Lee Street/Northwest Tollway Interchange and the Eastside Collateral Development in the fourth quarter of 2004. Construction of the relocated Lynxs Cargo Facility may begin in late 2002 before both the Touhy Avenue Detention Basin and Structure 140 have been substantially completed, meaning that as much as 3.4 acres of floodplain could be encroached upon prior to the full implementation of both detention facilities. Construction of relocated Bessie Coleman Drive is scheduled to be completed by the end of 2002. The Bessie Coleman Drive Relocation could encroach upon as much as 1.6 acres of floodplain if the Touhy Avenue Detention Basin and Structure 140 are not in full operation. Therefore, to address these temporary floodplain impacts, the Airport will provide 7.5 acres of temporary flood storage through construction and use of temporary detention basins until the Touhy Avenue Detention Basin and Structure 140 are fully operational. The temporary detention basins will be included in the design of these Proposed Projects if needed.

APPENDIX B

COMMUNITIES'/ORGANIZATIONS' REVIEWS

Following is a general summary of the comments received on the Draft EA from representatives of various communities and organizations regarding the proposal. Appendices R and S of the EA provide the specific comments received from the commentors and more detailed responses to each of the concerns. A summary of significant comments is set forth below in bold and responses are made in regular text.

Des Plaines

Mayor Tony Arredia of the City of Des Plaines testified during the public hearing on the Draft EA for the World Gateway Program. He expressed concern about the proposed interchange at Lee Street and its potential to cause increased truck traffic on the residential streets in Des Plaines. Des Plaines prefers an interchange at Elmhurst Road and not at Lee Street. The Mayor of Des Plaines requested that, at a minimum, the City of Chicago should coordinate with Des Plaines on this project to minimize impacts.

The Illinois State Toll Highway Authority is planning for full interchanges for both Elmhurst Road and Lee Street. The comment assumes that a full Lee Street Interchange with I-90 would be built instead of the completion of the Elmhurst Road interchange with I-90. Construction of only the Lee Street interchange might cause some traffic to use surface streets between that interchange and industrial/other uses west of the interchange. However, it is likely that any truck and other traffic would use arterials such as Touhy Avenue instead of smaller residential streets.

Completion of both interchanges as full interchanges is part of the long-term Regional Transportation Plan and the current 2001-2006 Transportation Improvement Program modeled by the Chicago Area Transportation Study. With the Elmhurst Road full interchange in place, it is unlikely that any significant quantity of traffic bound for industrial areas would use the Lee Street Interchange.

The City of Chicago has committed to coordinate with Des Plaines as the Lee Street Interchange design and planning process proceeds

Rosemont

A Village of Rosemont Trustee, Jack Dorgan, testified at the public hearing in support of the World Gateway Program. The City Engineer, on behalf of the Village of Rosemont, requested by letter to the City of Chicago dated December 20, 2001 that the Balmoral Avenue Tunnel be included as a project in the Environmental Assessment (EA).

The EA does not consider the connection of southbound Mannheim Road to Balmoral Drive by means of a Balmoral Tunnel as a project for which the City of Chicago is seeking approval from FAA at this time. The purpose for this connection between southbound Mannheim and Balmoral is separate and independent from the roadway access projects considered in the EA, including the extension of Balmoral Drive across Mannheim Road and into the terminal area. Traffic on southbound Mannheim already has access into the terminal areas via I-190. The proposed connection of southbound Mannheim Road to Balmoral Avenue will primarily facilitate connection between southbound Mannheim and the Rosemont Convention Center area, which is outside of the scope of the project's purposes evaluated in the EA. Nonetheless, the EA considers the potential effect of the Balmoral Avenue Tunnel connection between southbound Mannheim Road and Balmoral Avenue on traffic and other impacts for cumulative purposes in Sections 5.4 and 5.22 of the EA.

Bensenville

President John Geils of the Village of Bensenville expressed concern, during testimony at the public hearing, that the World Gateway Program is a major part of the "Integrated Airport Plan" that was proposed by the City of Chicago in 1998 and which he states is now virtually identical to the recent O'Hare Expansion Plan being proposed by Mayor Daley and Governor Ryan. The Village believes that this project is being "piecemealed" and is requesting an overall comprehensive environmental and economic review for the entire Daley-Ryan proposal, as well as the terminals and roadway projects. The Mayor of Elk Grove Village expressed similar concerns.

As discussed in Section 1.9 of the EA, the World Gateway Program is independent of the long-term concept. While new runways and terminals have been included on past drawings and documents, including a very conceptual map in 1998 labeled "Integrated Airport Plan," the World Gateway Program was evaluated as an independent and stand-alone project that does not depend on additional runways or changes to existing runways at the Airport. The EA reflects the fact that the World Gateway Program was planned to meet needs that would arise with the level of operations that could be accommodated in 2012 with or without additional runways. The fact that terminals and runways may have appeared on a map document does not indicate that the World Gateway Program terminals are dependent on a larger plan for their justification.

Since the World Gateway Program is independent of the long-term concept and is not a connected action, a single environmental review under NEPA is not required. Further, as discussed in Section 5.22 of the EA, detailed cumulative environmental and other analysis of the long-term concept would be speculative at this time, because planning, approvals, analysis and other requirements for the concept have not been completed.

As a matter of NEPA's intent and good public policy, it is reasonable to assess the effects of the independent Proposed Projects, including the World Gateway Program now because they would proceed with or without the long-term concept, do not affect

the likelihood of possible runway changes and would not affect any options for the long-term. Otherwise, the necessary terminal and roadway infrastructure improvements would have to wait years while long-term conceptual planning is finalized, even if they would not have any direct or cumulative significant impacts. Because the long-term concept will require development of an EIS by FAA that will include a full cumulative review of past, then present and future impacts (including the Proposed Projects), NEPA policy concerns about segmentation or cumulative impacts are not implicated by the review of the World Gateway Program in the EA. The Proposed Projects are not being reviewed separately to obscure significant impacts or avoid the ultimate need for an EIS. An EIS will be necessary if the long-term concept is to proceed, which will necessarily include an assessment of cumulative impacts that would be assessed at that time.

Park Ridge

The primary concerns expressed by Mayor Ron Wietecha and Alderman Steven Huening of the City of Park Ridge during testimony at the public hearing are related to air quality impacts, noise impacts and the quality of life in the vicinity of O'Hare.

Existing air pollution conditions are discussed in Section 4.12 of the EA and the effects of the Proposed Projects on air quality are evaluated in detail in Section 5.6 of the EA. As discussed in Section 4.12 of the EA, available scientific evidence suggests that the Airport is only a small contributor to area air pollution, including particle deposition and air toxics. The O'Hare area is surrounded by a multitude of non-airport sources of diesel and other emissions that affect overall air quality. As discussed in Section 5.6 of the EA, implementation of the Proposed Projects will reduce overall emissions of air pollutants, meaning that federal action will lead to an improvement of expected conditions. The Proposed Projects will reduce emissions of both criteria and air toxic pollutants. Further, dispersion modeling showed no projected violations of federal ambient air quality standards.

Related to noise concerns, Section 5.1 of the EA provides a detailed comparison of the World Gateway Program noise levels compared to those without the project. Noise reductions were projected in both future years studied because, with the World Gateway Program, fewer flights would be delayed into the nighttime hours when such flights would be subject to a 10-decibel penalty under the DNL noise metric.

Based on the analysis presented in the EA, the World Gateway Program will not create significant adverse impacts in any environmental resource categories or factors relating to quality of life considered under the National Environmental Policy Act (NEPA), or as required in FAA Orders 1050.1D and 5050.4A implementing NEPA.

Elk Grove Village

Mayor Craig Johnson of Elk Grove Village expressed strong concern, during testimony at the public hearing, that the World Gateway Program is being segmented from the long-term concept plan. The Mayor stated that the World Gateway Program is “not a freestanding project” and should be considered comprehensively with the concept plan. Other concerns expressed by the Mayor included noise impacts, air pollution, more gridlock, safety concerns, reduction in property values, tax bases, loss of jobs and disruption of communities.

The response to the Village’s concern that the World Gateway Program is being segmented from the proposed long-term concept plan are addressed above with the response to Bensenville’s concerns since they are similar issues. This issue is also discussed further in Chapter 8 of this ROD.

Based on the analysis presented in the EA, the World Gateway Program will not create significant adverse impacts in any environmental resource categories or factors relating to quality of life considered under the National Environmental Policy Act (NEPA), or as required in FAA Orders 1050.1D and 5050.4A implementing NEPA. Appendix S of the EA provides the specific responses to each of these concerns expressed by Elk Grove Village.

Village of Arlington Heights

Mayor Arlene Mulder of the Village of Arlington Heights submitted a letter to the City of Chicago on December 13, 2001 in support of the World Gateway Program, as it has the potential to reduce noise and air quality impacts and improve the quality of life for residents in Arlington Heights and other surrounding communities.

The Proposed Projects will reduce overall noise and air quality impacts and improve the quality of life for residents in the vicinity of O’Hare as documented in the EA.

Suburban O’Hare Commission

The Suburban O’Hare Commission (SOC) represents several Chicago suburban communities that oppose expansion at O’Hare. SOC, represented by Attorney, Joseph Karaganis, has expressed significant concerns regarding many issues related to proposed development at O’Hare, including the World Gateway Program. Following is a summary of the comments submitted to the City of Chicago by SOC on January 15, 2002.

The Demand Forecast

The “Unconstrained” Assumption and the Base Year:

SOC stated that the aviation forecasts used in World Gateway are unsupported, inconsistent with other forecasts, and too low. Use of regression analysis on past demand data does not create unconstrained forecast because the Airport has been capacity constrained. SOC has reason to believe that Chicago has substantially understated the demand in its environmental assessment.

The EA relies upon a reasonable forecast of activity through the 2012 project horizon. As discussed in Section 1.7 and Appendix E of the EA, the detailed forecast developed by the City is within 10 percent of the current FAA 2001 Terminal Area Forecast (TAF) for O'Hare, and FAA has accepted it for use in this EA and in planning for the World Gateway Program. FAA considers differences within 10 percent to be essentially equivalent for long-range forecasts and reasonable for planning purposes. Appendix E of the EA details the support for the methodology and data used for the forecasts. Further information regarding this comment is addressed in Appendix S, Response to Comment D-10 of the EA and in Chapter 9 of this ROD.

Other Chicago Landrum & Brown Forecasts:

SOC stated that the City of Chicago and its consultant have prepared a number of forecasts prior to the 1998 forecast used in the EA, including a forecast to 2020. SOC indicated that the Draft EA fails to reveal these forecasts or to explain the technical reasons for the differences in these forecasts and the one used in the EA.

The forecast used in the EA was developed based on the best available data and the methodology that has proved accurate in the past. The City's consultant has developed other forecasts in the past, including the 1993 forecast developed prior to the forecast used in this EA. The Draft and Final EAs include information regarding these accepted forecasts in Section 4 of Appendix E of the EA. It is common and reasonable practice to update forecasts when the input economic and demographic data have changed over time. Thus, the City published the updated forecast in 1998. As discussed and shown graphically in Appendix E of the EA, the forecast on which this EA is based has tracked actual values very well for the last three years. It is also close to previously developed forecasts for the same period, adding confidence to the reasonableness of the forecast approach. For more information regarding other forecasts, refer to Chapter 9 of this ROD.

FAA Forecasts:

SOC indicated that the Draft EA fails to disclose the various FAA forecasts and the reasons for their differences. Further, the EA fails to explain why the FAA's terminal area forecast for O'Hare projects so much lower a growth rate than FAA does for the nation as a whole.

The EA uses a forecast prepared by the City of Chicago. FAA has approved the use of this forecast for environmental assessment of the World Gateway Program, and it is

within 10 percent of FAA's most recent Terminal Area Forecast (the 2001 TAF), released in January 2002. Pursuant to FAA Order 5100.38A, forecasts generated by airport proprietors may be used for planning and other purposes if they are within 10 percent of the most recent TAF, because long-term forecasts within this range are considered essentially equivalent for planning and review purposes.

Both the City and FAA forecast rate of growth for the Chicago metropolitan area differ from national forecasts of growth in aviation activity, including FAA forecasts, because future activity at individual airports such as O'Hare will be dependent on local economic, demographic, industry and other trends. Because national growth trends aggregate activity across the country, many airports will have higher rates and many will have lower rates of growth.

Discussion of FAA forecasts other than the current TAF is unnecessary for the purposes of this EA. FAA updates its TAF for O'Hare and other airports every year on the basis of updated input data regarding population, industry trends, economic conditions and other relevant considerations. It also makes changes, as appropriate, to its forecast methodologies to improve the forecast approach. Section 1.7.2.2 of the EA identifies some of the factors that led FAA to adjust its most recent forecast of activity for O'Hare.

The Time Frame of the Demand Forecast:

SOC questions the use of a 12 (now ten) year forecast to the year 2012 since the FAA Benefit-Cost and economic analysis requirements call for at least a 20-year forecast to assess the benefits and costs of the projects. Similarly, the bonds to be sold for the World Gateway Program presumably have a 20-year life and the economic analysis to support the bonds will require a longer projection than 10 years.

The Benefit-Cost Analysis guidelines do not require use of a 20-year forecast period. (See FAA, FAA Airport Benefit-Cost Analysis Guidance, page 7, Dec. 15, 1999.) The guidelines provide that shorter periods may be preferable for some investments. As important, NEPA and its implementing regulations and orders do not specify any required period for forecasting or the use of benefit-cost analysis. Thus, the benefit-cost guidance is inapplicable to the environmental context. For this EA, 2012 was determined to be the most reasonable horizon as a result of the considerable uncertainty involved with critical detail -- including fleet mix -- beyond 2012.

The Booz-Allen Forecast:

SOC expressed concerns about the Booz-Allen Forecast and how that demand forecast compares with Chicago's EA forecast and the reasons for any differences. In addition, the EA fails to note that the same Booz-Allen prepared a supplement to the 1998 report a short time later which said that O'Hare needed new runways as soon as possible - a capacity assessment at odds with the EA.

Based on the growth projections contained in the Booz Allen report, the projected O'Hare demand in 2012 would be somewhat higher than predicted in the EA. However, the Booz Allen report contained little or no information regarding how the forecasts were developed. Further, the extrapolated 2012 value (49.1 million enplanements) is within 10 percent of both the City and FAA 2001 TAF forecasts. This is within the range that FAA considers to be generally equivalent for long-range forecasts.

The Booz Allen report does not contain detailed forecast information (e.g., fleet mix or flight schedules) for any year, including 2015 or 2020. Because of the great uncertainty involved with this information for purposes of environmental analysis, this EA does not rely on these forecasts.

There is no need to cite the Booz Allen report's indication of need for new runways at O'Hare in the EA. The subject is already addressed in the EA. Runway development as an alternative to the Proposed Projects is discussed in Chapter 3 of the EA. Independent planning relating to runway development concepts is discussed in Sections 1.9 and 5.22 of the EA. The analysis in Section 1.7 and Appendix H of the EA using standard FAA and industry methodologies indicates that the existing infrastructure would accommodate forecast operations through 2012, albeit at a lower level of service and higher levels of delay.

Refer to Chapter 9 of this ROD for further information related to forecast issues.

The Use of Current Information:

Are the population forecasts and income projections the current projections or have newer projections become available which may change the demand forecast used in the Draft EA? Please address our concerns and explain how use of alternative demand forecasts in appropriate sensitivity analyses would impact the conclusions of the EA. Such sensitivity analysis is required by FAA benefit-cost requirements. Use of these alternative demand and capacity analyses may have a dramatic impact on the environmental impacts.

The demand forecasts used in the EA are the City's most recent forecasts for O'Hare. They were published in 1998. The City forecasts of aviation activity for 2012 were compared to the most recent edition of the FAA Terminal Area Forecasts (TAF) released in January 2002 and were found to be within 2.4 percent on forecasts of passengers, and 8.6 percent on forecasts of aircraft operations. This is within the FAA requirement that local forecasts be within 10 percent of the FAA TAF. The FAA considers long-range forecasts that are within 10 percent of the TAF as being equivalent for planning purposes.

NEPA and relevant implementing provisions do not require sensitivity analyses in the same way that the Benefit-Cost Analysis guidance discusses variance of financial assumptions. An EA or EIS is not required to evaluate scenarios beyond the reasonably foreseeable forecast or the reasonable evaluation of the ability of the Airport

to accommodate demand based on foreseeable infrastructure, market conditions, air traffic control or other factors. The commentor does not identify reasonably foreseeable alternative demand or capacity forecast scenarios or indicate whether and how such forecasts would significantly affect the environmental analysis in this EA.

Capacity Analysis

What is the definition of acceptable capacity for a hubbing airport such as O'Hare? What is the level of average annual all weather delay (AAAW) at O'Hare for the base year (1997) and what is the current level of AAW based on reduced operations at O'Hare since September 11, 2001? What does Chicago say is the acceptable level of delay? How do base year (1997), current (post 9-11) and projected delays compare with the standard for acceptable levels of delay and the varying definitions of capacity?

The FAA has historically used a guideline of four minutes of average acceptable delay for planning of future airport facilities. This serves as a guideline for desirable airport performance, but is not indicative of a condition that would result in reduced demand. Six and 10 minutes of average delay have also been used in airport studies to describe lower levels of service, not for the determination of whether demand would be realized. No other industry guideline exists relative to maximum reasonable delays.

FAA has determined that the average annual all-weather (AAAW) delay was 6.77 minutes at O'Hare in 2000, (Federal Aviation Administration, Final Environmental Impact Statement, Chicago Terminal Airspace Project (Aug. 2001) (CTAP EIS)). Delay levels are expected to increase in the No Action alternative as operations increase in the future. FAA also has determined using SIMMOD in the CTAP EIS that the AAW delay on the existing airfield with CTAP in place would be 11.24 minutes with a level of 1.08 million annual operations -- about 100,000 operations greater than expected in 2012. This value, which is higher than would be expected in 2012 under the EA's forecasts, is just at the beginning of the range in which some effects on the rate of growth may begin. Accordingly, no significant effects on demand are expected through the forecast period for this EA. The values considered all weather conditions.

Although the aviation industry has not established a maximum aircraft delay standard, the Benefit Cost Analysis (BCA) Guidelines, released by FAA in December 1999, provides some guidance regarding potential effects of delay on activity levels. The BCA Guidelines indicate that delay may begin to affect growth in enplanement demand somewhere between 10 and 15 minutes of delay and that no or slight growth in demand would likely occur if delay levels were to reach 20 minutes.

The 1995 DOT report on the High Density Rule and The Capacity Benchmark Report:

The Draft EA fails to discuss the 1995 Department of Transportation High-Density Rule (HDR) report and fails to explain the discrepancy between that report, the

HDR report definition of "balanced capacity", the HDR report on existing and projected delays, and the desirability and ability of O'Hare to carry the EA's demand forecast at an acceptable level of delay. Further, the Draft EA fails to discuss and analyze the differences between the Capacity Benchmark Report and the 1995 HDR study and the impact of these differences on the capacity of O'Hare.

The analysis contained in this EA relies upon up-to-date forecasts and SIMMOD modeling, reflecting the effects of measures that have reduced delay at the Airport from the early 1990s (even with higher levels of operations). Accordingly, the EA does not rely upon the information in the 1995 DOT report regarding HDR. Similarly, the analysis in the EA is consistent with, but not based on, the capacity analyses contained in the Capacity Benchmark Report. Thus, SOC's concerns about the approach taken are not applicable to the existing EA.

Demand Capacity Analysis for Components of the Airport:

What models or other analytical tools were used for the demand/capacity analyses of the existing and projected terminals and roadways and where is the data used and discussion of those analyses? What quantitative capacity criteria were used in those Terminal and Landside analyses? There is no quantitative support in the EA demonstrating how the proposed terminal changes are needed to meet projected demand.

Appendix H of the EA discusses the simulation modeling of the existing and proposed terminal configurations using FAA's SIMMOD model. Chapter 2 of the EA contains information and data regarding the effects of the Proposed Projects on connection times, terminal space and other relevant issues.

Analysis of the surface transportation impacts of the Proposed Projects and existing infrastructure is contained in Section 5.4 of the EA. The analysis relied upon validated highway network and intersection models, including the Airport Landside Planning System, EMME/2 (from the Chicago Area Transportation Study) and Synchro 4.0. Critical input assumptions and data are included in Appendix M of the EA. The analysis demonstrated that the Proposed Projects would not cause any intersection or roadway link to deteriorate significantly. Similarly, Section 5.6 of the EA contains a discussion of whether any surface transportation link would result in a reduction in demand at O'Hare, concluding that the landside could accommodate anticipated demand and that it would not affect the level of demand at the Airport.

Terminal Design and Future Market Share:

If new traffic growth from runway capacity is split between United, American and spoke carriers along current market shares, the World Gateway concept of "seamless" passenger flow falls apart. How can the World Gateway Program terminal design be modified to accommodate the future growth of the massive O'Hare capacity expansion proposed by Mayor Daley and Governor Ryan?

As discussed previously, the proposed World Gateway Program would accommodate the level of passenger activity projected through 2012. As such, development of the World Gateway Program is independent of the long-term concept including runway development at O'Hare. The World Gateway Program requires no modification to accommodate the concept for new runways and possible further terminal expansion at O'Hare. Further discussion of the long-term concept is included in Chapter 8 of this ROD.

The entire capacity analysis was conducted without public access and scrutiny:

SOC indicated that the City of Chicago failed to make available documents, calculations, and programs underlying its demand capacity analysis and requested the data, models and analysis that were used for the SIMMOD analysis be made available for public inspection and comment prior to any decision on the Draft EA.

The SIMMOD analyses and other modeling work done to support the EA are public documents that are referenced extensively in the Draft and Final EA. Appendix H of the EA details the critical input assumptions, methodologies and sources for the SIMMOD modeling. Both the City and FAA have had SIMMOD and other modeling information available since the release of the Draft EA on November 8, 2001. SIMMOD is a publicly available model developed by FAA. Neither the City nor FAA received any requests during the public comment period for this detailed information regarding the World Gateway Program analysis of capacity or simulation efforts except for the commentor's request on the last day of the comment period. Further, the Appendices in the EA include considerable information regarding the inputs and outputs of these models. Nevertheless, the City has made computer files from the SIMMOD analysis available to the SOC on February 22, 2002.

Current Market Share, the existing runways, and the waste of Terminal 6 and 5:

SOC requested an explanation of the demand-capacity analysis for the non-United alliance and non-American carriers and their use of Terminals 6 and 5. Absent major new runway capacity there has been no showing that these carriers need the terminal capacity projected for Terminals 5 and 6 under the WGP.

The growth projected for O'Hare's alliance and non-alliance carriers is not constrained by a lack of airfield capacity, because the existing airfield could accommodate the projected total demand. As demand grows past current levels of activity, existing terminals do not have sufficient gates to accommodate additional traffic without increases in passenger inconvenience and travel times. Further, the size of aircraft is projected to grow, resulting in existing terminals being able to accommodate more passengers without a commensurate increase in the number of gates. In addition, demand will grow faster for international overseas flights that can only operate during a portion of the day. These flights tend to use larger aircraft. Parking these larger aircraft at existing terminals further reduces the number of gates at the existing terminals. The forecast supports the need for an additional Terminal that accommodates predominately existing activity for non-United alliance and non-American alliance carriers. Many of the

gates in T-6 are replacement gates for gates currently used by these “spoke” carriers in the core.

While the EA demonstrates that demand can grow and is forecast to grow past existing levels, it also demonstrates that the World Gateway Program accommodates existing needs to consolidate international and domestic operations for the major alliances through relocation of facilities that are used by non-alliance carriers to Terminal 5 and new Terminal 6. The accommodation of these needs does not depend upon new runways.

The Planning History of the World Gateway Program and the Integrated Airport Plan

SOC has stated in their comments that the 2001 O’Hare Expansion Proposal is virtually identical to the 1998 “Integrated Airport Plan.” SOC requested the documents and chronological meeting minutes, correspondence, and other documents related to the planning history of the WGP and its independence of the “Integrated Airport Plan.”

While new runways and terminal core projects have been included on drawings and documents prepared by consultants to the City, including a map labeled “Integrated Airport Plan” in 1998, the City never accepted, proposed or approved any “Integrated Airport Plan.” The City prepared the World Gateway Program as an independent, stand-alone project that does not depend in any way upon additional runways or changes to existing runways. Also refer to Chapter 8 of this ROD for further information on segmentation.

The City of Chicago forwarded a copy of the above requested materials to the Suburban O'Hare Commission on February 22, 2002.

The Benefit Cost Analysis

The EA fails to include as an Appendix the Benefit-Cost Analysis and make it available for comment. BCA (benefit-cost analysis) requirements compel Chicago to carefully examine the economic benefits and costs of incremental alternatives-including demand management and other alternatives that would reduce the benefit-cost ratio of the project to less than one, i.e. greater costs than benefits. Are the population forecasts and income projections the current projections or have newer projections become available which may change the demand forecast used in the Draft EA? Please address our concerns and explain how use of alternative demand forecasts in appropriate sensitivity analyses would impact the conclusions of the EA. Such sensitivity analysis is required by FAA benefit-cost requirements. World Gateway Program would expand the United and American monopoly. The EA and the BCA should quantitatively describe how the "preferential use" gates at Terminal 1, 2, 3 and 4 would enable significant new competition to enter the airport. The EA and BCA should further

quantitatively describe how the new competition would be able to fully utilize Terminals 5 and 6 given the fact that United and American schedules dominate the existing runway capacity of the airport.

NEPA and its implementing regulations and orders do not require the inclusion of a benefit-cost analysis (BCA) in an EA or EIS. Nonetheless, Chapter 2 of the EA and Appendix H of the EA discuss the benefit-cost analysis conducted by the City for the World Gateway Program included in an application to FAA for a Letter of Intent regarding Airport Improvement Program (AIP) funds. This BCA – referenced in this discussion in the EA – has been part of the record of this matter since the release of the Draft EA on November 8, 2001 (and available in its own right since February 28, 2001, when it was submitted to FAA as part of the Letter of Intent application).

NEPA and relevant implementing provisions do not require sensitivity analyses in the same way that the BCA guidance discusses variance of financial assumptions. An EA or EIS is not required to evaluate scenarios beyond the reasonably foreseeable forecast or the reasonable evaluation of the ability of the Airport to accommodate demand based on foreseeable infrastructure, market conditions, air traffic control or other factors. The commentor does not identify reasonably foreseeable alternative demand or capacity forecast scenarios or indicate whether and how such forecasts would significantly affect the environmental analysis in this EA.

Currently, most gates at O'Hare are exclusive-use gates. When an airline has a leasehold on a gate and has the exclusive right to use that gate throughout the day, it is referred to as an 'exclusive-use' gate. In comparison, a preferential-use gate system would give one airline preference in using a particular gate, but allows an airport to optimize the utilization of its gates by allowing other airlines to use the gate if it is not being used by the airline with the preferential-use lease.

The FAA Air Traffic Control System allocates capacity on a first-come, first-serve basis. As such, no one airline or individual aircraft has preferential use of the runway system at O'Hare or any other resource of the national air traffic system. Thus, any new entrant carrier will compete equally for peak period runway capacity at O'Hare.

Issues related to the BCA are also discussed in Chapter 9 of this ROD.

The Alternatives Analysis

SOC indicated that the City failed to fully explore demand management, use of other airports, or a new airport as alternatives to the World Gateway Program. SOC indicated that these alternatives might provide better benefit cost ratios than the World Gateway Program. Further, SOC requested that the EA discuss the impact of the use of AIP funds for the World Gateway Program on available federal funding for the South Suburban Airport as well as for the remainder of the Daley-Ryan long-term plan.

Section 3.1.4.1 of the EA considered various approaches to demand management and concluded that they would not meet the purposes and needs for the Proposed Projects. Demand management would pose risks of aggravating some of the conditions that the Proposed Projects, and specifically the World Gateway Program, are intended to alleviate. For example, if demand management led to the de-peaking of the hub airline schedules, it could lead to longer or less convenient connections than might otherwise be the case.

As discussed in Chapter 3 of the EA, development of a new airport or use of existing airports beyond levels already forecast would not meet the purposes and needs of the World Gateway Program because it would not address the needs of passengers and flights that would still use O'Hare. As discussed in Chapter 2 of the EA, the need for improvements in the terminal area exists today and would not be eliminated through additional capacity elsewhere. The purpose and need for the Proposed Projects are not tied simply to finding projects that may have a particular benefit-cost ratio. Instead, they focus on needs that will be faced by the Airport during the planning period, even if another airport were built. In addition, the forecasts on which the EA was developed accounted for the fact that there are already other airports serving all or parts of the Chicago Air Trade Area (a 13-county area in Illinois, Indiana, and Wisconsin, described in Chapter 1 of the EA) that would have excess capacity during the forecast period. However, airlines at O'Hare will continue to use O'Hare because of the importance of connections to other domestic and international flights. Neither FAA nor the City can require an airline to use any particular airport, and barring or restricting operations at O'Hare would not meet the purposes and needs of the World Gateway Program.

The Federal Airport Improvement Program (AIP) has traditionally made two kinds of grants available for airport development projects -- Entitlement Grants and Discretionary Grants. Entitlement Grants are allocated to each airport based on actual annual passenger and cargo activity at that airport and are not competitively awarded. AIP Discretionary Grants are awarded by the FAA based on requests from airports and the FAA's nationwide priorities. AIP was reauthorized by Congress in 2000 with the following funding authorizations by fiscal year: 2000 -- \$2.475 billion; 2001 -- \$3.2 billion; 2002 -- \$3.3 billion; 2003 -- \$3.4 billion (CRS Report for Congress, RL30096: Airport Improvement Program Reauthorization Legislation in the 106th Congress. Robert S. Kirk updated April 17, 2000, www.cnire.org/nle/crsreports/transportation/trans-33.cfm). The amount of funding that will be appropriated for AIP in subsequent years is not known as it depends on future Congressional action. The potential impact of the award of AIP Discretionary Funding to the World Gateway Program on other airport projects is impossible to assess with any degree of precision. The key point is that in determining whether to award Discretionary Grants, the FAA will evaluate each project on its own merits at the appropriate time, in the context of nationwide requests and its established priorities.

Air Quality

The air quality analysis is based on a flawed demand-capacity analysis. There is no discussion of the health effects of the toxic chemicals emitted by O'Hare. There is no discussion of where the toxic chemical emissions from O'Hare operations travel and into which residential communities and at what concentrations. There is no basis for concluding that the levels of toxic pollution referenced in the Park Ridge Study are "acceptable." What are the health risks posed by the IEPA measurements?

The air quality analysis is completely documented in the EA. Appendix I of the EA discloses the methodologies used and the input and output data supporting this analysis, including aircraft fleet mix, aircraft time-in-modes, aircraft temporal factors, aircraft departure queue temporal factors, aircraft assignment to terminals and taxiways, ground support equipment assignments, runway use, motor vehicle traffic volumes, parking lot temporal factors, airport roadway intersections, fuel storage and handling, boiler fuel usage, training fires, aircraft maintenance, deicing activities, and construction estimates. The commentor did not raise concerns or identify any flaws with any of this information. The tables and other material in Appendix I refer readers to original source documents or computer files, which are public documents that the City has had available for review in electronic form since the Draft EA was published on November 8, 2001. These materials were too voluminous to include in the Draft EA. Other than this comment made on the last day of the comment period, neither the City nor FAA received any formal or informal requests during the comment period (or beyond) to review the air quality data upon which the EA relies. Nevertheless, electronic files containing air quality analysis inputs and outputs were provided to commentor Joseph Karaganis on February 22, 2002.

NEPA and its implementing provisions do not require a full public health study or catalogue of each potential chemical that may be associated with airport operations. Instead, NEPA requires sufficient analysis to understand the implications of the proposed action. In this case, the Proposed Projects would reduce the emissions of air toxic substances. In addition, overall air toxic emissions are expected to decrease between 2000 and 2012 with or without the Proposed Projects due to the more efficient engines that would be implemented with a more modern aircraft fleet mix.

Further discussion of air quality issues is also included in Chapter 9 of this ROD.

Noise

SOC indicated that the noise modeling input data and manipulation of that data has not been made available to the public for review. SOC requested the data and computer manipulations of the noise modeling. There was no analysis of noise under various alternatives and there was no discussion of other noise metrics.

Section 5.1 and Appendix G of the EA contain data used in the aircraft and roadway noise analyses, as well as references to other information relied upon for the noise analyses. This includes average daily operations by aircraft type, average daily operations by time of day, average daily operations and runway use percentages. Because of the large volume, detailed flight track data was not included in the EA itself, but was referenced in the EA. This noise information has been available since publication of the Draft EA on November 8, 2001. Neither FAA nor the City received requests for this information during the public comment period other than the request included in the comment provided to the City on the last day of the comment period. All noise model input and output files were sent to the commentor on February 22, 2002.

While alternatives involving the use of other airports and demand management were considered in Chapter 3 of the EA, neither approach was considered a prudent or reasonable alternative to the World Gateway Program because neither one (either alone or in combination) would have met the purpose and need for the Proposed Projects. Therefore, the detailed evaluation of those alternatives, including noise analysis, was not undertaken.

There is continuing debate among noise experts about how best to express aircraft noise impacts. The most recent evaluation of this issue was conducted as part of the Federal Interagency Committee on Noise (FICON). The conclusion reached by FICON was that there are no new descriptors or metrics of sufficient scientific standing to substitute for the present DNL cumulative noise exposure metric.

DNL is the required metric for describing noise in Environmental Assessments. Under the rules guiding the development of environmental documents set forth by the FAA in its Orders 5050.4A (Airport Environmental Handbook) and 1050.1D (Policies and Procedures for Considering Environmental Impacts, Section 13), impacts must be disclosed using the DNL metric. However, supplemental information on other metrics may be included if it would assist the federal decision maker in making an informed decision on the effects of the proposed project. Appendix G of this EA provides such additional information in the form of outdoor Leq, SEL, Lmax and Time-Above 65 decibels during an average 24-hour period. This supplemental information is provided for 27 separate locations within the airport environs that would experience the only area of potential noise increases. At none of these locations do the Proposed Projects result in a "significant" change in the noise environment compared to the No Action alternative.

Segmentation

SOC had commented that the World Gateway Program is "clearly part of the terminal component of the "Integrated Airport Plan."

While new runways and terminal core projects have been included on drawings and documents prepared by consultants to the City, including a map labeled "Integrated Airport Plan" in 1998, the City never accepted, proposed or approved any "Integrated

Finding of No Significant Impact / Record of Decision

Airport Plan.” The City prepared the World Gateway Program as an independent, stand-alone project that does not depend in any way upon additional runways or changes to existing runways. Further discussion of the segmentation is included in Chapter 8 of this ROD.

Alliance of Residents Concerning O’Hare/US Citizens Aviation Watch Association

Jack Saporito, who represents Alliance of Residents Concerning O’Hare (AReCO) and the US Citizens Aviation Watch Association (USCAWA), gave testimony at the public hearing for the World Gateway Program. In addition, a substantial number of scoping comments were transmitted to the City of Chicago by AReCO in a letter dated October 19, 2000. Review comments from AReCO and USCAWA were also submitted to the City of Chicago in a letter dated January 15, 2002. Due to the substantial number of comments transmitted in these letters, the following is a summary of the major issues that were expressed. For the detailed comments submitted by AReCO and USCAWA on the Draft EA and the responses to these comments, refer to Appendices R and S of the EA, respectively.

Concerns expressed by AReCO and USCAWA included segmentation and the need to conduct a full EIS for all proposed development at O’Hare, quality of life issues, health, safety, air quality and toxic emission, noise impacts, water quality, socioeconomic, surface transportation, hazardous waste impacts, dismissal of viable alternatives such as high-speed rail, delay and capacity issues, the need to identify all baseline environmental data and many other general concerns associated with development at O’Hare.

The major issues raised by AReCO and USCAWA cover items such as segmentation, cumulative impacts, and the need to prepare an EIS which are discussed in detail in Chapter 8 of this ROD. Further, comments raised about quality of life issues, air quality and air toxics, noise impacts, alternatives analysis, including high speed rail and use of other airports, delay and capacity issues, and forecasts are discussed in detail in Chapter 9 of this ROD. However, because of the magnitude and specificity of additional comments submitted by AReCO and USCAWA, each of the individual responses have not been discussed specifically in this ROD, but are included in their entirety in Appendix S of the Final EA. The responses to the comments raised by AReCO and USCAWA, included in Appendix S of the EA, covered a wide range of issues including segmentation, quality of life, health issues, noise, air quality and toxic emissions, water quality, socioeconomic impacts, hazardous waste impacts, surface transportation, alternatives, as well as other general concerns that were raised.

DuPage Mayors and Managers Conference

The DuPage Mayors and Manager Conference, represented by Lynn Montei at the public hearing for the World Gateway Program, had concerns that their comments made during the Scoping Meeting were not addressed in the Draft EA.

They also expressed general opposition to the way that the public coordination was conducted. She has stated that the World Gateway Program's failure to acknowledge plans for runways makes the process a ruse and that the process has not provided meaningful public or stakeholder participation.

The commentor was not specific as to which comments were not addressed in the Draft EA. However, the commentor's scoping comments were considered in developing the scope of the EA. See Appendix D of the EA at D-142 to D-144, D-172. The commentor requested that the environmental review process consider the environmental justice impacts of the Proposed Projects, including impacts to the entire metropolitan area.

Section 5.23 addresses the environmental justice impacts of the Proposed Projects. It does not consider impacts beyond the EA's study area because there were no significant adverse environmental impacts associated with the Proposed Projects within or beyond, the study area. Next, the commentor asked that the EA consider how the effects of the same noise level may vary from place to place. Sections 5.1 and 5.2 and Appendix F of the EA consider the impacts of the Proposed Projects on noise and conclude that the Proposed Projects will reduce noise except in a small area with no homes or schools. The commentor requested that the EA utilize a 20-year time frame for the environmental analysis. Section 1.7 of the EA explains why the 2012 horizon year establishes the reasonable time frame for review of the Proposed Projects. In addition, the commentor requested an evaluation of the impact of the Proposed Projects on state and local roads. Section 5.4 of the EA contains an analysis of the roadways potentially affected by the Proposed Projects. The commentor asked that the EA specifically identify and analyze the South Suburban Airport as an alternative to the Proposed Projects. Chapter 3 of the EA specifically discusses and assesses whether the South Suburban Airport could serve as an alternative to the World Gateway Program. The commentor also asked that all elements of the Proposed Projects be identified up front and requested that consideration be given to the need for an environmental impact statement (EIS). Both the Draft and Final EA presented the full scope of the Proposed Projects, including the World Gateway Program. Further, the EA identifies the role of the document in providing a record on which FAA can make a determination of whether to prepare an EIS or a Finding of No Significant Impact (FONSI).

The public process conducted for the EA has exceeded relevant requirements and guidance for preparing an EA. The public has been provided extensive opportunities for notice and comment through a scoping meeting, public hearing regarding the Draft EA, public comment period for the Draft EA and additional agency and other coordination conducted by the City of Chicago. See Appendix D of the EA. The City and the FAA have considered the input and comments received during these processes. The Draft EA acknowledged the proposed long-term concept, including runways, for O'Hare and explained its independence from the World Gateway Program. See Section 1.9 of the EA.

Other communities in the vicinity of O'Hare, including Schiller Park, Franklin Park, Northlake, Wood Dale, as well as additional communities throughout the project study area, were given an opportunity to review and comment on the Draft EA for the Proposed Projects, including the World Gateway Program. However, no comments were received from these communities.

**Congressman Henry Hyde and
Letter to the Northeastern Illinois Planning Commission**

Attorney Joseph Karaganis, representing Congressman Henry Hyde, gave testimony at the public hearing for the World Gateway Program. A letter was also submitted to the Northeastern Illinois Planning Commission (NIPC) by Mr. Karaganis that identified the same issues as presented in his testimony at the public hearing.

These comments expressed by Mr. Karaganis in the testimony and in the letter to NIPC dated December 12, 2001 included segmentation and the belief that the World Gateway Program is part of the previous "Integrated Airport Plan", the failure of the City of Chicago to make available the documents, calculations, and programs underlying its demand forecast analysis, capacity analysis, the noise analysis, and the failure to disclose what it means by the capacity of an airport.

These issues are similar to comments submitted by the Suburban O'Hare Commission, and as such, are addressed within the discussion under the Suburban O'Hare Commission heading. Some of these issues, including segmentation, are also presented in further detail in Chapter 8 of this ROD.

Further, testimony was given that Chicago has failed to identify and disclose the impact of the World Gateway Program on the existing monopoly overcharge problem at O'Hare.

The commentor provides no basis for the claim that the World Gateway Program would be detrimental to competition at O'Hare. The World Gateway Program would provide more terminal capacity to both hubbing and non-hubbing carriers at the Airport, allowing more opportunities for competition than the No Action alternative. Many spoke carriers are now located in the oldest and least efficient terminal, Terminal 2. Spoke carriers would receive fully modernized, efficient and competitive terminal space in the new Terminal 6 that would also be connected with Terminal 5 space used by their international alliance partners. The linear layout of Terminal 6 is ideally suited for spoke carrier operations, because all flights would be a short walk from parking facilities and the curbfront, making the Terminal 6 spoke carriers more attractive to local passengers than they are today from a convenience perspective. Additional space will allow for improved frequent flier lounges, concessions, holdrooms and other amenities that would allow spoke carriers to improve their service. New preferential and common use gate policies which the City intends to actively pursue as part of the development of the

Finding of No Significant Impact / Record of Decision

terminal project would also help to enhance competition by preventing any carrier from denying the use of gates to other carriers.