050203_01

FAA-050218-005

U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, DC 20515

Don Young
Chairman

Lloyd A. James, Chief of Staff
Elizabeth Megginson, Chief Counsel

James L. Oberstar
Ranking Democratic Member

David Heymsfeld, Democratic Chief of Staff

February 3, 2005

Honorable Marion Blakey
Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Administrator Blakey:

Attached is information provided to me that outlines concerns with respect to Chicago's O'Hare Modernization Plan. I would appreciate your views and comments on these issues.

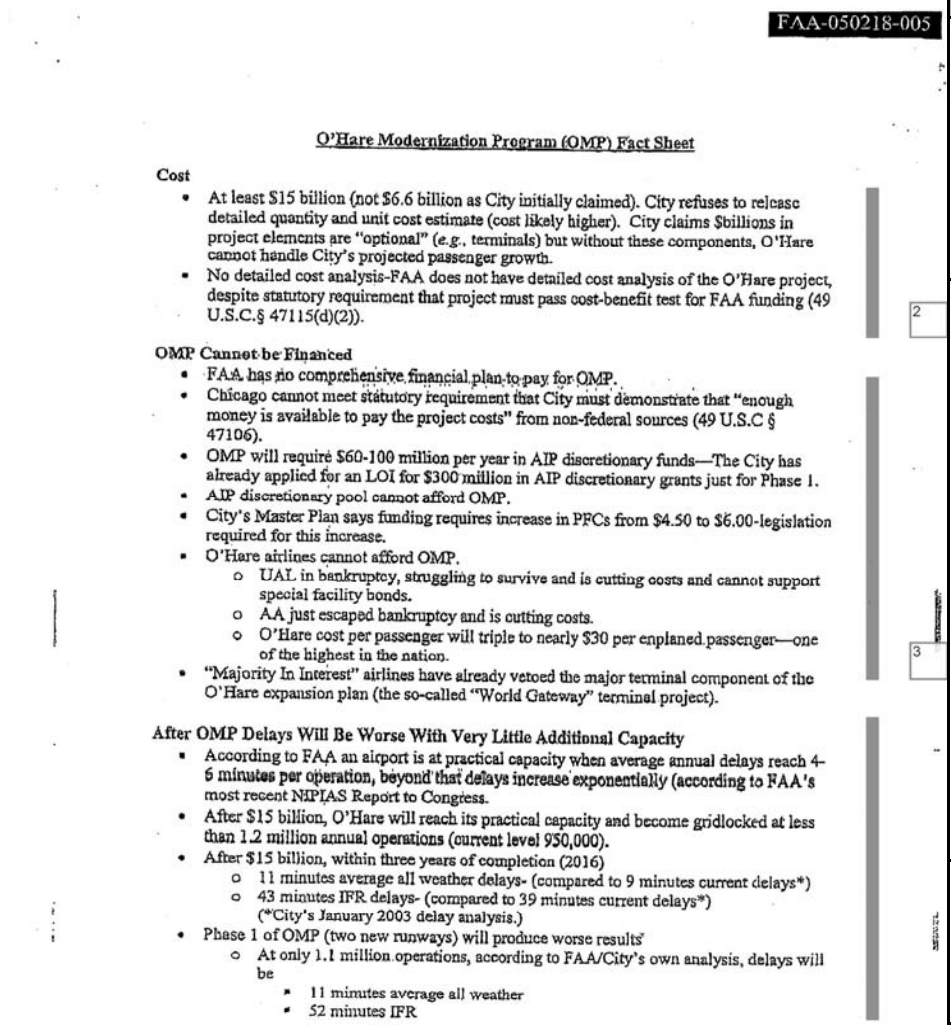
Obviously, we need to develop more airport and runway capacity across the Nation, but we need to ensure that the benefits of any expansion project will be realized once it has been completed.

Thank you for looking into this matter. 1

Sincerely,

John L. Mica
Chairman
Subcommittee on Aviation

Comment	Response
1	Comment noted. The FAA provided an interim response to Congressman Mica's letter on March 29, 2005 indicating that responses would be forthcoming in the Final Environmental Impact Statement (EIS) and Record of Decision. Although the Congressman's letter was not included in the Final EIS, the concerns raised in the letter were addressed in the Final EIS.



FAA-050218-005

O'Hare Modernization Program (OMP) Fact Sheet

Cost

- At least $15 billion (not $6.6 billion as City initially claimed). City refuses to release detailed quantity and unit cost estimate (cost likely higher). City claims $billions in project elements are "optional" (*e.g.*, terminals) but without these components, O'Hare cannot handle City's projected passenger growth.
- No detailed cost analysis-FAA does not have detailed cost analysis of the O'Hare project, despite statutory requirement that project must pass cost-benefit test for FAA funding (49 U.S.C.§ 47115(d)(2)). 2

OMP Cannot be Financed

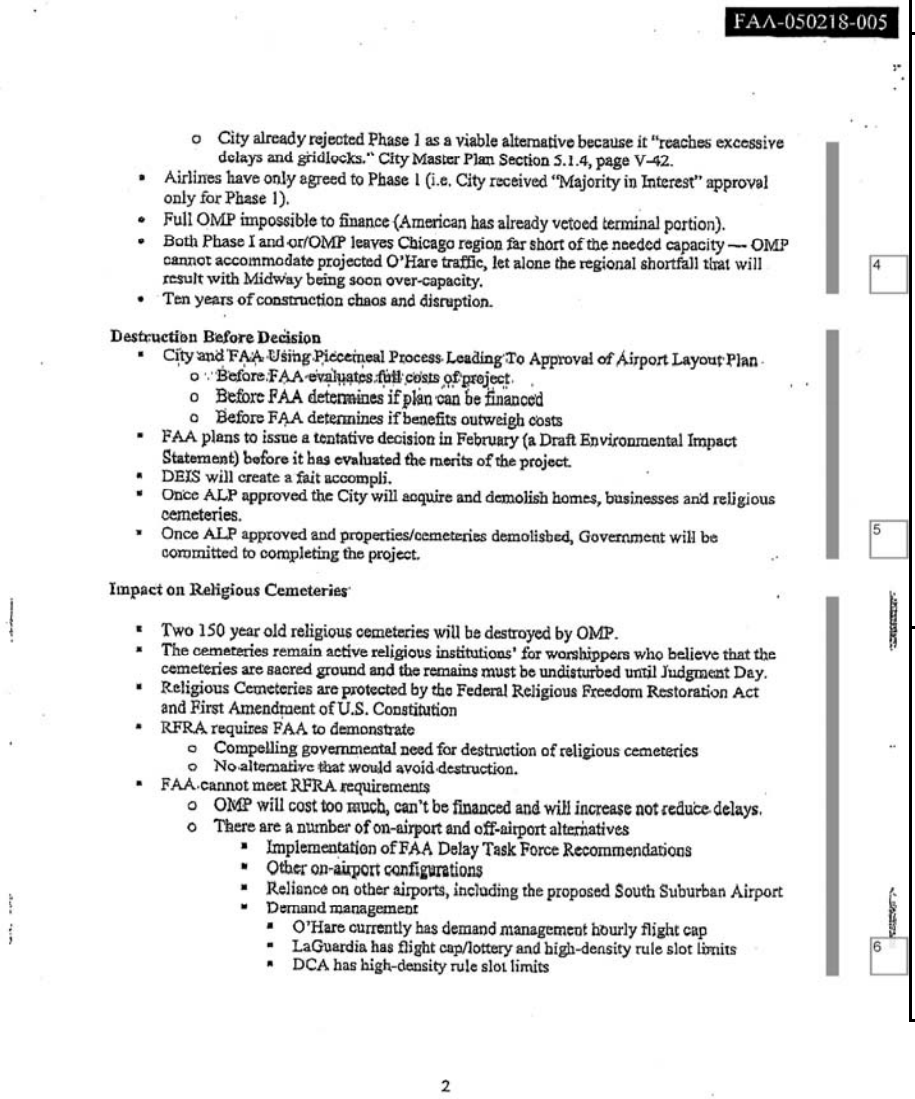
- FAA has no comprehensive financial plan to pay for OMP.
- Chicago cannot meet statutory requirement that City must demonstrate that "enough money is available to pay the project costs" from non-federal sources (49 U.S.C § 47106).
- OMP will require $60-100 million per year in AIP discretionary funds—The City has already applied for an LOI for $300 million in AIP discretionary grants just for Phase 1. 3
- AIP discretionary pool cannot afford OMP.
- City's Master Plan says funding requires increase in PFCs from $4.50 to $6.00-legislation required for this increase.
- O'Hare airlines cannot afford OMP.
  - UAL in bankruptcy, struggling to survive and is cutting costs and cannot support special facility bonds.
  - AA just escaped bankruptcy and is cutting costs.
  - O'Hare cost per passenger will triple to nearly $30 per enplaned passenger—one of the highest in the nation.
- "Majority In Interest" airlines have already vetoed the major terminal component of the O'Hare expansion plan (the so-called "World Gateway" terminal project).

After OMP Delays Will Be Worse With Very Little Additional Capacity

- According to FAA an airport is at practical capacity when average annual delays reach 4-6 minutes per operation, beyond that delays increase exponentially (according to FAA's most recent NIPIAS Report to Congress.
- After $15 billion, O'Hare will reach its practical capacity and become gridlocked at less than 1.2 million annual operations (current level 950,000).
- After $15 billion, within three years of completion (2016)
  - 11 minutes average all weather delays- (compared to 9 minutes current delays*)
  - 43 minutes IFR delays- (compared to 39 minutes current delays*)
  (*City's January 2003 delay analysis.)
- Phase 1 of OMP (two new runways) will produce worse results
  - At only 1.1 million operations, according to FAA/City's own analysis, delays will be
    - 11 minutes average all weather
    - 52 minutes IFR

1

Comment	Response
2	The FAA responded to this comment in Chapter 1, Section 1.7 of the Final EIS and the topical response L-1 on page U.5-44 of Appendix U of the Final EIS. FAA funding decisions regarding the project will be made after issuance of this Record of Decision. This ROD provides eligibility for Federal grant-in-aid funds and/or PFC (see Section 13 of the ROD). In a separate process, the FAA is currently reviewing the City's submittal for an Airport Improvement Program (AIP) Letter of Intent application including a benefit-cost analysis.
3	The FAA respectfully disagrees with this comment. Each of the issues raised by this comment that "OMP cannot be financed" was raised in great detail in comments made on the Draft EIS and responded to by FAA one-by-one in the Final EIS. The FAA directs the commenter to Appendix U, Section U.4 of the Final EIS, pages U.4-558 through U.4-580 for the FAA responses to these issues. With regard to bullet 1, the FAA notes that the City of Chicago does have a financing plan within their Master Plan, and the FAA has reviewed the plan, see Section 1.7 of the Final EIS. With regard to bullet 2, the FAA responded to each of these comments in addressing comments filed by Karaganis-Cohn on September 6, 2005. See response to comment 4, beginning on page A.2-78 of this Appendix A of the ROD. With regard to bullets 3-7, the FAA responded to each of these comments in addressing comments filed by Campbell-Hill on April 6, 2005. See response to comments 101 – 109, beginning on page U.4-565 of Appendix U of the Final EIS.
4	The FAA respectfully disagrees with the comment that "[a]fter OMP Delays Will be Worse With Very Little Additional Capacity." The FAA responded to each of these comments in addressing comments filed by Campbell-Hill on April 6, 2005. See comments 43-87, beginning on page U.4-525 of Appendix U of the Final EIS.



FAA-050218-005

- City already rejected Phase 1 as a viable alternative because it "reaches excessive delays and gridlocks." City Master Plan Section 5.1.4, page V-42.
- Airlines have only agreed to Phase 1 (i.e. City received "Majority in Interest" approval only for Phase 1).
- Full OMP impossible to finance (American has already vetoed terminal portion).
- Both Phase I and or/OMP leaves Chicago region far short of the needed capacity — OMP cannot accommodate projected O'Hare traffic, let alone the regional shortfall that will result with Midway being soon over-capacity.
- Ten years of construction chaos and disruption.

4

Destruction Before Decision

- City and FAA Using Piecemeal Process Leading To Approval of Airport Layout Plan
  - Before FAA evaluates full costs of project.
  - Before FAA determines if plan can be financed
  - Before FAA determines if benefits outweigh costs
- FAA plans to issue a tentative decision in February (a Draft Environmental Impact Statement) before it has evaluated the merits of the project.
- DEIS will create a fait accompli.
- Once ALP approved the City will acquire and demolish homes, businesses and religious cemeteries.
- Once ALP approved and properties/cemeteries demolished, Government will be committed to completing the project.

5

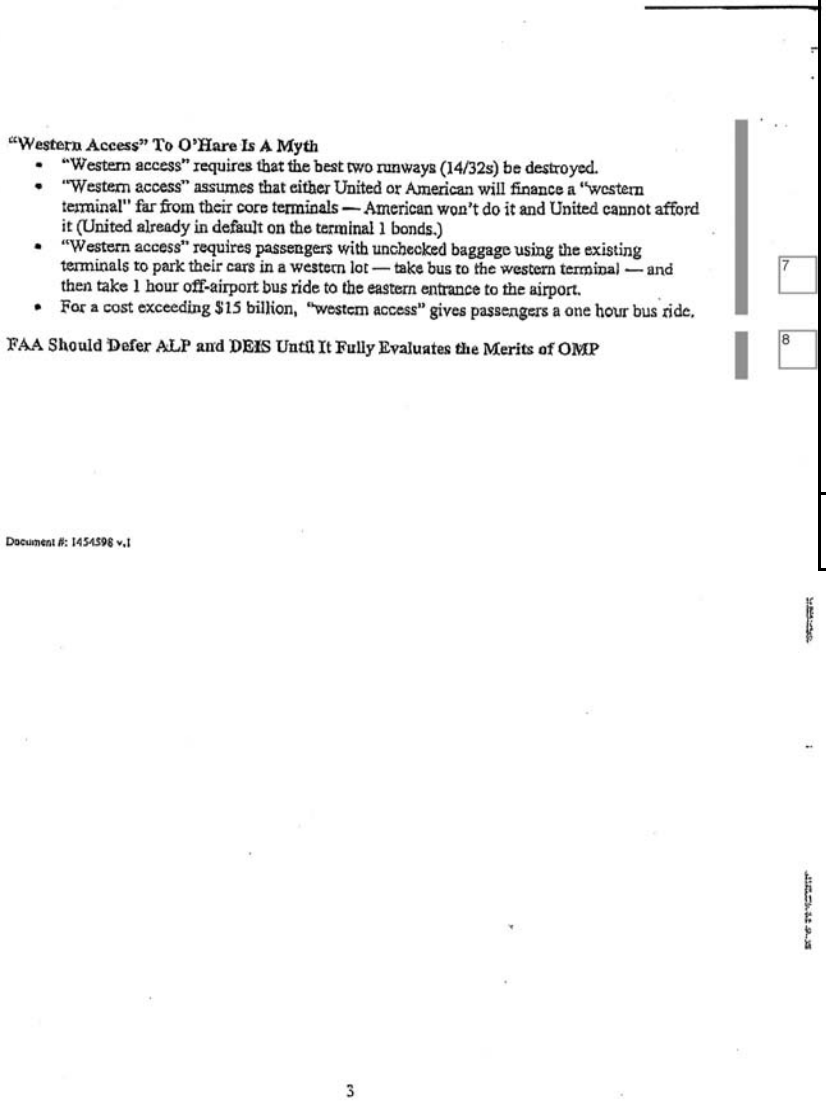
Impact on Religious Cemeteries

- Two 150 year old religious cemeteries will be destroyed by OMP.
- The cemeteries remain active religious institutions' for worshippers who believe that the cemeteries are sacred ground and the remains must be undisturbed until Judgment Day.
- Religious Cemeteries are protected by the Federal Religious Freedom Restoration Act and First Amendment of U.S. Constitution
- RFRA requires FAA to demonstrate
  - Compelling governmental need for destruction of religious cemeteries
  - No alternative that would avoid destruction.
- FAA cannot meet RFRA requirements
  - OMP will cost too much, can't be financed and will increase not reduce delays.
  - There are a number of on-airport and off-airport alternatives
    - Implementation of FAA Delay Task Force Recommendations
    - Other on-airport configurations
    - Reliance on other airports, including the proposed South Suburban Airport
    - Demand management
      - O'Hare currently has demand management hourly flight cap
      - LaGuardia has flight cap/lottery and high-density rule slot limits
      - DCA has high-density rule slot limits

6

2

Comment	Response
4	See the previous page for the response to this comment.
5	The comment was written prior to the publication of the Final EIS. In response to similar comments received on the Draft EIS, the FAA presented further information on its review of the cost estimate and the financial feasibility of the proposal in the Final EIS in Chapter 1, Section 1.7. FAA has concluded that it is reasonable to assume that, based upon the impact O'Hare has on the Chicago region, as well as the NAS, and the benefits to the regional economy, there will be sufficient funds to complete the City's proposal. Further, in response to comments on the Draft EIS, FAA reviewed additional cost-related information applicable to the project. For purposes of this review under the National Environmental Policy Act (NEPA), the FAA has concluded that the estimated costs of the project are reasonable. In addition, FAA believes that with a project of this magnitude and importance, the availability of projected funding sources is sufficiently reasonable and capable of being obtained. This determination is made without prejudice to evaluation of the City's pending Letter of Intent request, which is a separate process from this environmental analysis. Additionally, FAA responded to similar comments filed by Karaganis-Cohn on September 6, 2005. See response to comment 2, beginning on page A.2-78 of this Appendix A of the ROD.
6	The FAA has considered the impacts to both Rest Haven and St. Johannes cemeteries. Since the publication of the Final EIS, the FAA has determined that Rest Haven can be left in place. In response to comments received on the Draft EIS, the FAA evaluated alternatives and derivatives of alternatives that would avoid the acquisition of the cemeteries; this evaluation is contained in Section 3.6 of the Final EIS. In addition, the Final EIS at Section 5.22 presented the FAA's proposed findings with respect to issues arising under the First Amendment and RFRA. The Agency invited public comment on those tentative findings. After careful consideration of those comments, the FAA has made its final determinations under the religious liberty issues at Section 12 of this ROD. These determinations are fully responsive to the comments presented here.



"Western Access" To O'Hare Is A Myth

- "Western access" requires that the best two runways (14/32s) be destroyed.
- "Western access" assumes that either United or American will finance a "western terminal" far from their core terminals — American won't do it and United cannot afford it (United already in default on the terminal 1 bonds.)
- "Western access" requires passengers with unchecked baggage using the existing terminals to park their cars in a western lot — take bus to the western terminal — and then take 1 hour off-airport bus ride to the eastern entrance to the airport.
- For a cost exceeding $15 billion, "western access" gives passengers a one hour bus ride.

7

FAA Should Defer ALP and DEIS Until It Fully Evaluates the Merits of OMP

8

Document #: 1454598 v.1

3

Comment	Response
7	The FAA respectfully disagrees with the comment that "'Western Access' To O'Hare Is A Myth." With regard to bullet 1, while it is true that Runways 14R/32L and 14L/32R are phased out with the selected alternative, it is only 14R/32L that is decommissioned due to the development of western access including a western terminal. More importantly, the runways are planned to be decommissioned to reconfigure the airfield resulting into a more modern runway configuration, (i.e. DFW). The future airfield would result in 6 parallel runways with two-crosswind runways. With regard to bullet 2, The FAA responded to each of these comments in addressing comments filed by Campbell-Hill on April 6, 2005. See comment 103, beginning on page U.4-568 of Appendix U of the Final EIS. With regard to bullets 3-4, the FAA responded to this comment in the topical response F-4 on page U.5-30 of Appendix U of the Final EIS.
8	The FAA has responded to this issue in Section 10.1.1 of this Record of Decision.

050405_01

APR 20 2005

April 5, 2005

Federal Aviation Administration
Great Lakes Region Headquarters
2300 E. Devon Avenue
Des Plaines IL 60018

C. L. Hunziker, Regional Administrator

Due to a 2-month bout with the flu, the following statements and opinions - modifying my original comments regarding the proposed O'Hare airport expansion previously submitted in 2004 – were delayed. However I believe you will find the enclosed material of interest. Since I'm now semi-retired, any enhancement of the said material would be possible in person if it is so desirable. 1

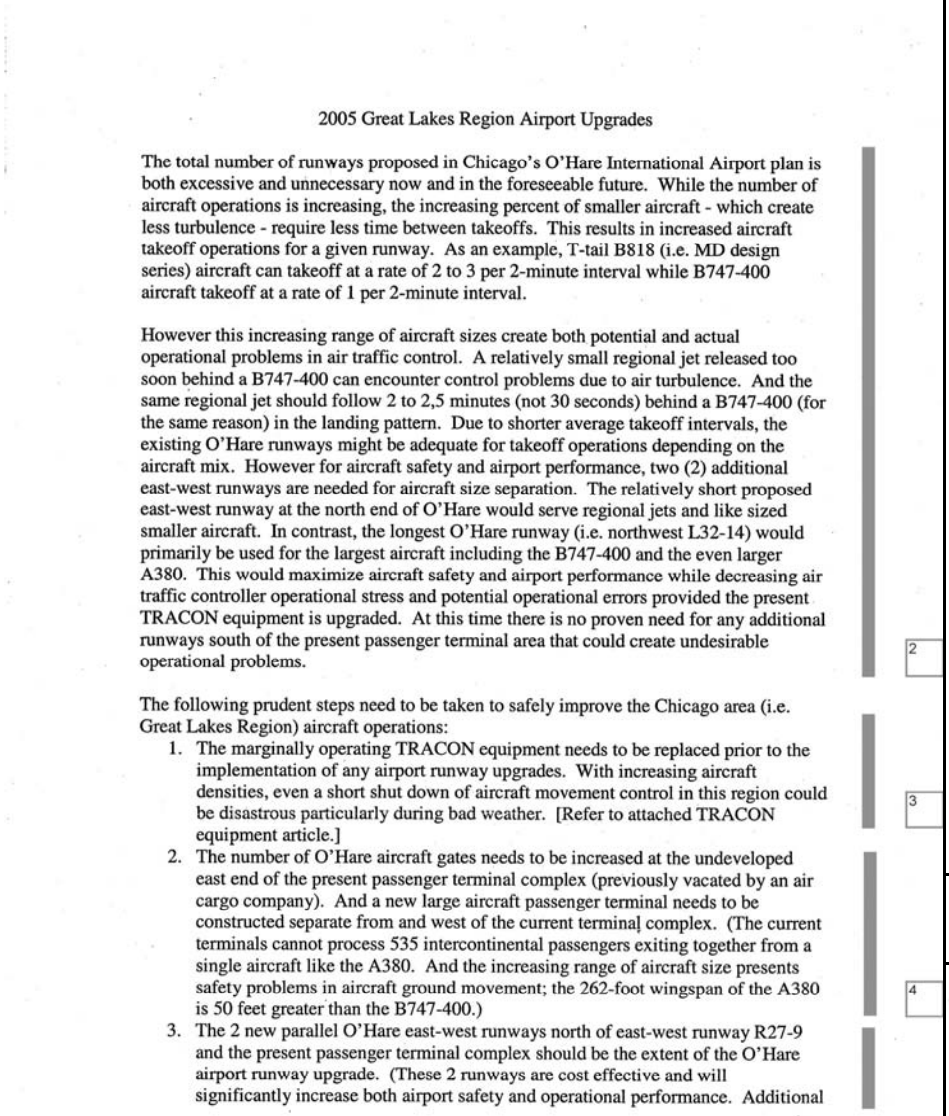
Sincerely yours,

Richard Blomberg

R. Blomberg
P. O. Box 292
Elmhurst IL 60126-0292

Note: The following (4 pages) was submitted in written form (originally) and mailed on April 6th

Comment	Response
1	Thank you for your comments regarding the Environmental Impact Statement (EIS).



2005 Great Lakes Region Airport Upgrades

The total number of runways proposed in Chicago's O'Hare International Airport plan is both excessive and unnecessary now and in the foreseeable future. While the number of aircraft operations is increasing, the increasing percent of smaller aircraft - which create less turbulence - require less time between takeoffs. This results in increased aircraft takeoff operations for a given runway. As an example, T-tail B818 (i.e. MD design series) aircraft can takeoff at a rate of 2 to 3 per 2-minute interval while B747-400 aircraft takeoff at a rate of 1 per 2-minute interval.

However this increasing range of aircraft sizes create both potential and actual operational problems in air traffic control. A relatively small regional jet released too soon behind a B747-400 can encounter control problems due to air turbulence. And the same regional jet should follow 2 to 2,5 minutes (not 30 seconds) behind a B747-400 (for the same reason) in the landing pattern. Due to shorter average takeoff intervals, the existing O'Hare runways might be adequate for takeoff operations depending on the aircraft mix. However for aircraft safety and airport performance, two (2) additional east-west runways are needed for aircraft size separation. The relatively short proposed east-west runway at the north end of O'Hare would serve regional jets and like sized smaller aircraft. In contrast, the longest O'Hare runway (i.e. northwest L32-14) would primarily be used for the largest aircraft including the B747-400 and the even larger A380. This would maximize aircraft safety and airport performance while decreasing air traffic controller operational stress and potential operational errors provided the present TRACON equipment is upgraded. At this time there is no proven need for any additional runways south of the present passenger terminal area that could create undesirable operational problems. 2

The following prudent steps need to be taken to safely improve the Chicago area (i.e. Great Lakes Region) aircraft operations:

1. The marginally operating TRACON equipment needs to be replaced prior to the implementation of any airport runway upgrades. With increasing aircraft densities, even a short shut down of aircraft movement control in this region could be disastrous particularly during bad weather. [Refer to attached TRACON equipment article.] 3
2. The number of O'Hare aircraft gates needs to be increased at the undeveloped east end of the present passenger terminal complex (previously vacated by an air cargo company). And a new large aircraft passenger terminal needs to be constructed separate from and west of the current terminal complex. (The current terminals cannot process 535 intercontinental passengers exiting together from a single aircraft like the A380. And the increasing range of aircraft size presents safety problems in aircraft ground movement; the 262-foot wingspan of the A380 is 50 feet greater than the B747-400.) 4
3. The 2 new parallel O'Hare east-west runways north of east-west runway R27-9 and the present passenger terminal complex should be the extent of the O'Hare airport runway upgrade. (These 2 runways are cost effective and will significantly increase both airport safety and operational performance. Additional

Comment	Response
2	The comments regarding the number of runways needed at O'Hare are noted. Primarily, the comments made are in relation to the dynamic fleet mix used by airlines at O'Hare. The FAA carefully considered the items mentioned in the commenter's remarks in the analysis conducted for the EIS. In fact, the FAA did take into account the changing O'Hare fleet mix used by the airlines serving O'Hare. The commenter correctly notes that the fleet mix has much to do with the capacity of the airfield, as well as runway length and aircraft in-trail separation requirements. In a very detailed, thorough, and carefully conducted airfield and airspace simulation modeling analysis, the FAA evaluated the existing airport, as well as other airfield alternatives taking into account the fleet mix and associated in-trail separations. This simulation modeling analysis projects the levels of delay associated with the various alternatives considered including alternatives with less runways than the City of Chicago proposed. In addition, the FAA notes that an Air Traffic Working Group, consisting of air traffic controllers from the Chicago O'Hare Airport Traffic Control Tower, the Chicago O'Hare Terminal Radar Approach Facility, and the Chicago Air Route Traffic Control Center, and other experts reviewed and concurred with the simulation modeling analysis. Through this intensive review, the FAA has found that the levels of delay associated with alternatives involving less airfield development (i.e. less runways) demonstrate the need for each of the runways proposed by the City of Chicago. For further information, the FAA directs the commenter to Appendix B of the Final EIS, where there is a presentation of the fleet mix utilized for each year of analysis for both the unconstrained flight schedule in Table B-10, page B-20 (assuming improvements at O'Hare) and the constrained flight schedule in Table B-12, page B-28 (assuming the existing airfield at O'Hare). In addition, details regarding the simulation modeling is presented in Appendix D of the Final EIS.
3	FAA continually monitors its equipment needs and updates and upgrades the equipment as needed.
4	Alternative C, the selected alternative, includes a new western terminal as well as two new terminals in the existing terminal area to accommodate the projected level of passengers. Alternative C also includes improvements to the airfield to accommodate New Large Aircraft (NLA) such as the forthcoming Airbus A380. With regard to the purpose and need and alternatives considered, the FAA directs the commenter to Chapters 2 and 3 of the Final EIS.

excessive costly runway expansion would result in the same problems presently facing the St. Louis area.) 5

4. A southern runway should be built, but at Chicago's Midway Airport. (Parallel to the present single northwest runway – with the same east and west boundaries – it would provide the same operational latitude being sought for the O'Hare airport.) 6

-rcb

Comment	Response
5	As noted in response to comment 1 above, the FAA has found that the levels of delay associated with alternatives involving less airfield development (i.e. less runways) demonstrate the need for each of the runways proposed by the City of Chicago. In addition, the FAA notes that the existing airfield currently has 6 runways (2 east-west, 2 northwest-southeast, 2 northeast-southwest). Alternative C, the approved alternative, would include a total of 8 runways (4 east-west and 2 northeast-southwest). Finally, in a process separate from this EIS the FAA is reviewing, the benefit-cost analysis as a part of the Agency's review of the City of Chicago's Letter of Intent (LOI) application for airport improvement grant funding. A decision has not been reached on this request.
6	In accordance with the National Environmental Policy Act of 1969 (NEPA), the FAA is required to evaluate the City's proposal and alternatives to it from an environmental standpoint. Currently, the City is not proposing the addition of a runway at Midway, and it is unlikely they would consider it given the constraints surrounding the airfield. For further information on Midway, see Appendix C of the Final EIS.

AirTraffic Control Post
January/February 2005
Vol. 19, Issue 1

NATCA's take on FAA staffing report: A "Wal-Mart solution in a Tiffany box"

Recent report criticizes agency for slowing down STARS timetable

The Department of Transportation inspector general's office recently released a report spotlighting the Federal Aviation Administration's troubled record on terminal modernization and implementing Standard Terminal Automation Replacement System (STARS).

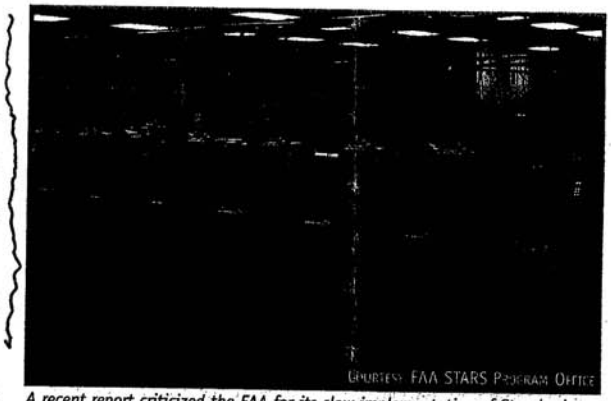
"Faced with additional cost growth in the STARS program, FAA is rethinking its terminal modernization approach - a long overdue step that should have been taken several years ago," the report stated. And a number of large TRACONS - Chicago, Denver, Minneapolis and St. Louis - are still functioning on 1970s-era displays.

While the FAA initially planned to completely upgrade to STARS by this year, it has extended its timeframe to 2008 at key facilities where the need for updated software is most urgent.

At Denver TRACON, the outmoded displays lock up sometimes as often as once a week; Chicago controllers also experience similar problems. Ray Gibbons, the facility representative at Chicago TRACON, remarked in the *Chicago Tribune* "the antiquated system we are working with today is pushed to the limit every day. The radar scopes frequently lock up, and the locations of aircraft do not update on the screen. Sooner or later, the dam is going to burst."

Doug Fralick, NATCA's director of safety and technology, agreed with the report and noted that its findings echo the union's position on the FAA's slow implementation of STARS. "We agree with the findings of the report. These facilities simply cannot afford to wait until 2008 for updated displays," he remarked.

NATCA President John Carr and Fralick met with the inspector general's office several months before the report came out and voiced NATCA's concerns about the agency's timetable for deploying STARS.



A recent report criticized the FAA for its slow implementation of Standard Terminal Automation Replacement System (STARS) at various facilities.

According to the report, the FAA's budget estimate was $2.1 billion in 2004, which was over $300 million more than the previous year. The report noted: "FAA is now operating in a constrained budget environment and has very little ability to absorb further cost growth in any of its acquisition programs."

Yet, the need for upgrade at some of the nation's largest terminal facilities will remain dire for the foreseeable future.

4

050523_01

Donald Bekeleski
<dbekeleski@yahoo.com>
05/23/2005 12:30 PM

To 9-AGL-600-OMPEIS/AGL/FAA@FAA
cc
bcc
Subject OMP SEC 303/4F & AIR QUALITY

Dear Sir:
I tried and can't seem to get the document to open on your web site.
Irregardless, right from the beginning this plan stinks!
It is going to cost way over what Daley is saying. The airlines that are picking up the tab are in deep financial trouble. The runway design (criss cross) in certain areas is totally unsafe.
It will destroy the tax basis of Elk Grove. It will put thousands of people out of work if their employer is torn down. There is only so much air space up there and you can't clog it up with more planes. It creates more noise nuisances and air pollution.

Lastly please don't approve this in the name of politics!!

You are bigger than that--you are the Federal Government!

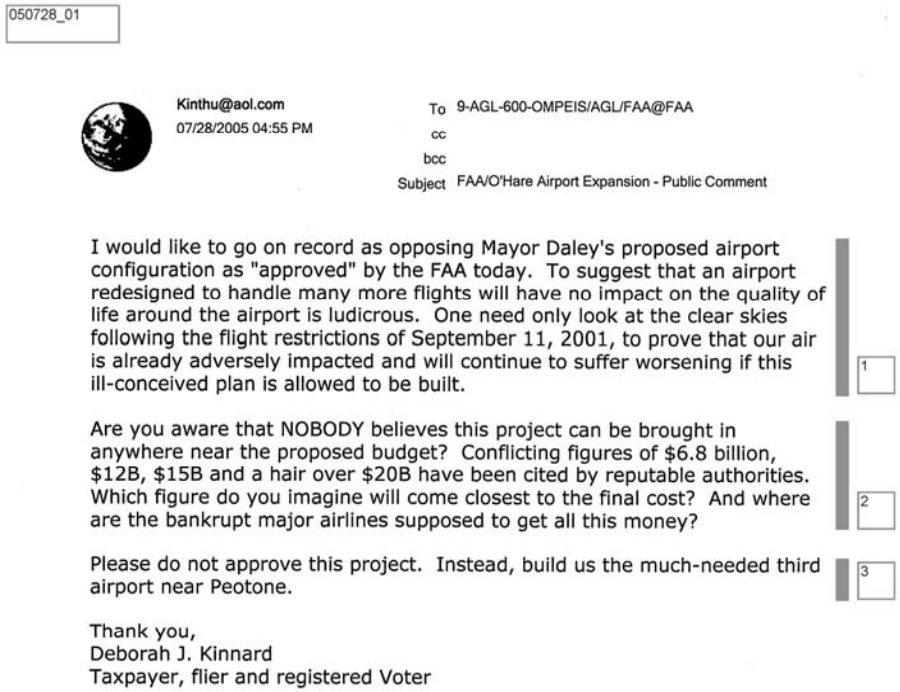
I pray you see this plan for what it is ---FLAWED.

1

Sincerely,
Donald, Nancy, Pamela Bekeleski
1506 Haise Lane
Elk Grove Village, Il. 60007

A GUN IN THE HAND IS BETTER THAN A COP ON THE PHONE!
THOSE WHO TRADE LIBERTY FOR SECURITY HAVE NEITHER!

Comment	Response
1	Thank you for your comments regarding the Environmental Impact Statement (EIS). Each of the issues raised by the commenter were taken into account in the EIS. The FAA refers the commenter to the following sections of the Final EIS: the cost estimates for the project (see Section 1.7 of the Final EIS), the need for improvements (see Chapter 2 of the Final EIS), the safety of the proposed airfield layout (See Appendix U, Section U.5, response to comments K-1, K-2), the potential tax loss to surrounding communities (Section 5.4 of the Final EIS), the impact on employment (Section 5.4 of the Final EIS), the implications to the surrounding airspace (Chapter 3 of the Final EIS), as well as noise (Section 5.1) and air quality impacts (Section 5.6). The FAA also directs the commenter to Appendix U, Section U.5 of the Final EIS, where the FAA responded to the very same issues raised by the commenter. Section U.5 can be found in the beginning of Volume 9 of the Final EIS. In addition, the FAA notes that the commenter's previous comments and FAA's respective references to responses on the Draft EIS, can be found in Section U.10 on pages U.10-81, U.10-103, and U.10-157.



050728_01

Kinthu@aol.com
07/28/2005 04:55 PM

To 9-AGL-600-OMPEIS/AGL/FAA@FAA
cc
bcc
Subject FAA/O'Hare Airport Expansion - Public Comment

I would like to go on record as opposing Mayor Daley's proposed airport configuration as "approved" by the FAA today. To suggest that an airport redesigned to handle many more flights will have no impact on the quality of life around the airport is ludicrous. One need only look at the clear skies following the flight restrictions of September 11, 2001, to prove that our air is already adversely impacted and will continue to suffer worsening if this ill-conceived plan is allowed to be built. 1

Are you aware that NOBODY believes this project can be brought in anywhere near the proposed budget? Conflicting figures of $6.8 billion, $12B, $15B and a hair over $20B have been cited by reputable authorities. Which figure do you imagine will come closest to the final cost? And where are the bankrupt major airlines supposed to get all this money? 2

Please do not approve this project. Instead, build us the much-needed third airport near Peotone. 3

Thank you,
Deborah J. Kinnard
Taxpayer, flier and registered Voter

Comment	Response
1	The FAA notes the commenter's opposition to Agency approval of the City's proposed O'Hare Modernization Program (Alternative C). The FAA also notes that the air quality assessment of the proposal can be found in Section 5.6 of the Final EIS. Finally, the FAA directs the commenter to response E-1 beginning on page U.5-25 of Appendix U of the Final EIS.
2	In the Final EIS, in responses to similar comments received on the Draft EIS, the FAA presented further information on its review of the financial feasibility of the proposal in the Final EIS in Chapter 1, Section 1.7. The FAA's presentation of the cost estimate is contained in Table 1-11 of the Final EIS. With regard to the effect of the bankruptcy of airlines, the FAA notes that the Agency has conducted a sensitivity assessment of the financing plan for the OMP, including a what-if scenario involving the loss of a hubbing carrier at O'Hare. This sensitivity assessment examined a number of mechanisms the City could employ should part of the funding for the project not be implemented as planned. These mechanisms include deferral of improvements, use of contingency, increased debt issuance, and short-term borrowing. The sensitivity assessment demonstrated that changes in cost per enplaned passenger resulting from the use of these mechanisms would not be substantial and in some instances could be offset by cost benefits from the project's implementation.
3	The FAA has selected Alternative C (the City of Chicago's alternative) in this Record of Decision. In the EIS, the FAA did evaluate the proposed South Suburban Airport as an alternative to improvements at O'Hare, however this alternative did not meet the purpose and need, (See Chapter 3 of the EIS). Further, the FAA notes that the Agency is currently conducting an Environmental Impact Statement for the proposed South Suburban Airport. Finally, the FAA directs the commenter to response B-2 beginning on page U.5-7 of Appendix U of the Final EIS.

050729_01

Chuck Ellenbaum
<ellenbaumbridge@mac.com>

07/29/2005 05:56 PM

To 9-AGL-600-OMPEIS/AGL/FAA@FAA
cc Herald Letters <foxletters@dailyherald.com>, Trib Letters <ctc-TribLetter@tribune.com>
bcc
Subject O'Hare Airport Expansion Public Comment

Dear Sirs:

I believe that O'Hare Airport is too important to be left in the hands of Chicago alone. I believe O'Hare, Midway, DuPage, and Palwaukee Airports need to be governed by a regional airport authority. This will ensure greater cooperation among our airports.

Given the corruption being exposed constantly within the Mayor Daly administration, I do not think the state or the country can afford to trust Chicago with this resource. I would suggest the regional airport authority could be modeled on the Regional Transportation Authority. This gives the entire metro-Chicago area a governing say in the airports in our region. As it is, I find it un-American that the brunt of the seized homes, businesses, and cemeteries are being taken by people who cannot vote in Chicago.

1

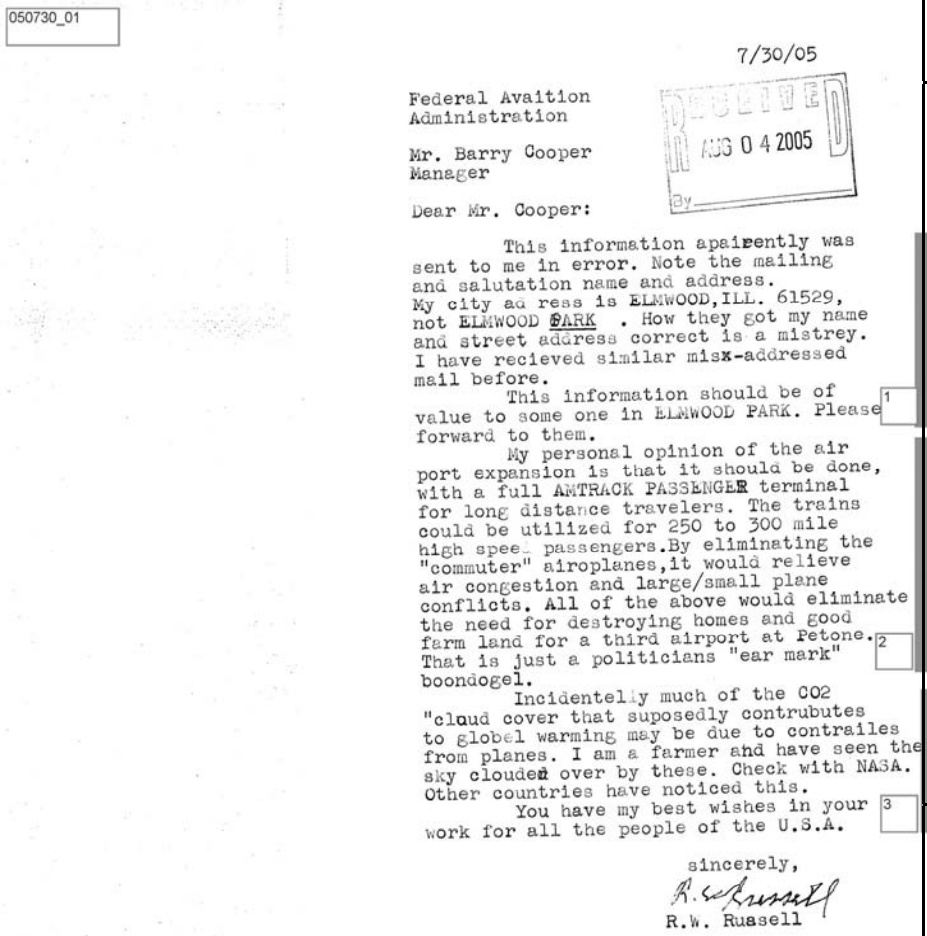
I strongly urge the formation of a regional airport authority.

Charles O. Ellenbaum
707 Shady Avenue
Geneva, IL 60134 USA
Cell: 630-404-1261
Home: 630-262-1281
>ellenbaumbridge@mac.com<

"The sea never changes, and its works, for all the talk of man, are wrapped in mystery." Joseph Conrad

"When beholding the beauty of the ocean skin, one forgets the tiger heart that pants beneath it." Herman Melville

Comment	Response
1	The FAA received similar comments on the Draft EIS regarding the suggestion that a regional airport authority be formed to govern the area's airports. In the Final EIS on page U.5-50, the FAA responded as follows: "[t]his comment is beyond the scope of the EIS proposal, which involves environmental review of the City's proposal and alternatives to the proposal. The City of Chicago owns O'Hare International Airport and Midway International Airport. The FAA does not have the authority to require that a regional authority manage the region's airports. These decisions are left to the state and local government officials."



050730_01

7/30/05

RECEIVED
AUG 04 2005
By

Federal Avaition
Administration

Mr. Barry Cooper
Manager

Dear Mr. Cooper:

This information apairently was sent to me in error. Note the mailing and salutation name and address. My city aa ress is ELMWOOD,ILL. 61529, not ELMWOOD PARK . How they got my name and street address correct is a mistrey. I have recieved similar misx-addressed mail before.

This information should be of value to some one in ELMWOOD PARK. Please forward to them. 1

My personal opinion of the air port expansion is that it should be done, with a full AMTRACK PASSENGER terminal for long distance travelers. The trains could be utilized for 250 to 300 mile high spee passengers.By eliminating the "commuter" airoplanes,it would relieve air congestion and large/small plane conflicts. All of the above would eliminate the need for destroying homes and good farm land for a third airport at Petone. 2 That is just a politicians "ear mark" boondogel.

Incidentelly much of the CO2 "cloud cover that suposedly contrubutes to globel warming may be due to contrailes from planes. I am a farmer and have seen the sky clouded over by these. Check with NASA. Other countries have noticed this.

You have my best wishes in your work for all the people of the U.S.A. 3

sincerely,

R.W. Ruasell

Comment	Response
1	The FAA has provided the information sent to this commenter in error to appropriate parties in Elmwood Park, Illinois. The FAA appreciates the clarification from the commenter.
2	The comment is noted. The FAA notes that use other modes of transportation, including both conventional and high-speed rail was evaluated as an alternative to O'Hare improvements. However, this alternative did not meet the purpose and need of the Environmental Impact Statement (EIS). Alternatives C, the selected alternative, include an extension of the Airport Transit System (ATS), which links with the Metra Transfer Station. This station is on Metra's North Central line, which provides the ability to travel to O'Hare from Union Station in Chicago. The O'Hare Transfer Station is located east of the intersection of Mannheim Road and Zemke Road. Currently, a shuttle bus service takes passengers between the Metra station and the ATS station at Lot E for transfer to the Airport. In addition, the Chicago Transit Authority Blue Line currently links downtown Chicago to O'Hare with the terminus in the lower level of the Main Parking Garage at O'Hare. In accordance with the National Environmental Policy Act of 1969 (NEPA), the FAA is required to evaluate the City's proposal and alternatives to it from an environmental standpoint. Where appropriate, the FAA encourages airport sponsors to provide for intermodal facilities, however, it is the airport sponsor's prerogative to plan for such facilities. With regard to commuter airplanes, the FAA does not have the authority to determine the equipment or fleet mix of aircraft employed by air carriers.
3	In 2000, the United States Environmental Protection Agency (USEPA) issued a fact sheet that identified the state of the science considering the understanding and possible effects of "condensation trails" or "contrails." In general contrails are long, linear clouds sometimes produced by aircraft flight at aircraft cruise altitudes several miles above the Earth's surface. As noted in the Fact Sheet: "The combination of water vapor in aircraft engine exhaust and the low ambient temperatures that often exists at these high altitudes allows the formation of contrails. Contrails are composed primarily of water (in the form of ice crystals) and do not pose health risks to humans. They do affect the cloudiness of the Earth's atmosphere, however, and therefore might affect atmospheric temperature and climate." The FAA notes the commenter's concern regarding air quality. The FAA did assess potential air quality impacts of the proposed project in Section 5.6 of the EIS. Finally, the FAA directs the commenter to responses E-1 and E-3 beginning on page U.5-25 of Appendix U of the Final EIS.

050730_02

Timothy A. Taylor
128 Orchard Avenue
Bensenville, Illinois 60106
(630) 595-1681

July 30, 2005

Mr. Michael MacMullen
Federal Aviation Administration
2300 East Devon Avenue
Des Plaines, Illinois 60018

Dear Mr. MacMullen:

On behalf of myself and my family, I wish to thank the Federal Aviation Administration (FAA) for allowing me to offer this written testimony in regard to the FAA's recently released O'Hare Modernization Final Environmental Impact Statement (FEIS).

Having briefly viewing the FEIS on-line, I wish to comment regarding the Environmental Justice (EJ) portion. When considering the EJ issues, I am compelled to comment regarding the impact of the Bensenville government on its citizens concerning O'Hare expansion. As background for my comments, I have attached testimonies from a Village Board Meeting and a Park District Board Meeting. 1

As indicated, attached is a copy of written testimony that I read at a May 16, 2005 Bensenville Village Board Meeting. I asked four questions, one of which concerned a park called, Schuster Park. The Village's response to the park question was that it was the Park District's problem and that I should call the Park District to fix the park. I do not believe that the Village included my comments in the actual Minutes of their meeting; however, I do believe the meeting was taped and then broadcast on COMCAST a week or so later. Also, attached is testimony that I read at a Bensenville Park District Board Meeting on July 27, 2005, as well as the Park District's response to my questions.

As stated in the testimonies in regard to the Village of Bensenville's July 5, 2005 letter to the FAA, I am disappointed with the Village of Bensenville's mischaracterization of Schuster Park. I would hope the FAA could respond to the Village's blatant misrepresentation of Schuster Park. It is a shame that this type of behavior exhibited by the Village has been consistent throughout their years of fighting O'Hare expansion. 2

As a resident in the proposed southern runway area, I truly hope the FAA moves forward and will accept the full expansion option in its Record of Decision. This would give the area, the state and the nation the needed boost for economic development in and around the airport, as well as ease air-traffic flow across the United States. This would also give my family the opportunity to move to an area not dictated by the whims of the Bensenville Village Board. 3

Comment	Response
1	Comment noted.
2	FAA notes the comments offered in your letter of July 30, 2005. Concerning Schuster Park, the FAA is coordinating with the National Park Service and Illinois Department of Natural Resources regarding this property and is confident that mitigation of the impacts to this park will be accomplished in compliance with all appropriate laws and regulations. The attached correspondence related to Schuster Park to and from the Bensenville Park District is included in the record. For further information on Schuster Park, please see Section 9.7 of the Record of Decision.
3	The FAA notes the commenter's support for the full-build proposal. The FAA has, in this Record of Decision, selected Alternative C, the City of Chicago's proposal.

Timothy A. Taylor
128 Orchard Avenue
Bensenville, Illinois 60106
(630) 595-1681

July 27, 2005

I wish to thank the Bensenville Park District Board for allowing me the opportunity to offer testimony this evening. I was going to ask the Village this question, but when I attended the July 18, 2005 Board Meeting, it was immediately cancelled and switched to a Thursday evening session that I could not attend. So, I have come here this evening to inquire about the Bretman-Schuster Complex.

I visited a Village of Bensenville Board Meeting on May 16, 2005 and inquired as to what all the fuss was about a park called Schuster Park that was mentioned during a Bensenville Intergovernmental Group (BIG) Meeting just prior to the May 16th session. I mentioned that as an 11year resident of Bensenville, I didn't even know that the playlot down the street from me even had a name. To be honest, it's a rather dumpy park with outdated park equipment that maybe my kids and I have gone to at most five times. I asked since the Village was so set on keeping the park out of the hands of the City of Chicago, why don't they update the park? The response I received was that it was the Bensenville Park District's responsibility to fix the park; I should go the Park District and ask them to fix the park.

I recently went on-line to the Village's website and downloaded material that was sent to the FAA on July 5, 2005. The letter to the FAA states the the FAA has mischaracterized Schuster Park in its Draft Environmental Impact Statement. The Draft Evaluation describes Schuster Park as follows: "Based on the location of this park, its assets, and size, this park appears to be a neighborhood park. The residences in close proximity to the park, whose occupants are likely the primary users of this park, would be acquired under any of the Build Alternatives. Therefore, the location of the replacement property would not necessarily need to be located in close proximity to the current park location."

The Village implores that this is incorrect...the Village states that the park is a "significant recreational resource currently used by citizens residing throughout the Village of Bensenville, not just those that would be displaced..." The document also states that Bretman Park (owned by the Village) - that's behind the townhomes is also a significant recreational resource.

Finally, the Village of Bensenville states that it "...has plans to upgrade Bretman Park with additional recreational facilities to make Bretman Park even more of a recreational resource for residents from throughout Bensenville. It is the Village's hope that under a cooperative relationship with the Bensenville Park District, the Bretman-Schuster complex will – even more than it is today – be one of the major recreational resources in Bensenville."

So, my inquiry leads to this:

- Has the Village of Bensenville approached the Bensenville Park District in regard to creating a Bretman-Schuster Complex?
- If so, at what cost?
- Would the Park District agree with the Village in its characterizations of Schuster and Bretman Parks?
- Does the Park District agree with the FAA's characterization of Schuster Park?
- Anyone know why the Village after not even two months after my original inquiry, has embraced the idea of improving not only Schuster Park, but Bretman Park, as well?

The portion regarding Schuster Park from the Village's letter to the FAA is attached.

Again, I thank you for your time this evening.

Encl.

Timothy A. Taylor
128 Orchard Avenue
Bensenville, Illinois 60106

May 16, 2005

Village President and Village Trustees
Special Village Board Meeting
12 S. Center Street
Bensenville, Illinois 60106

My name is Tim Taylor and I reside at 128 Orchard Avenue, Bensenville, Illinois. I have four questions. I thank you for the opportunity to speak this evening.

The first question concerns the enforcement of the Village of Bensenville's Ethics Ordinance. I only come to this body now because there seems to be no effort by the Village Board to enforce its own Ordinance.

The Ethics Ordinance states: "The public has a right to expect that every public official and employee will conduct themselves in a manner that will tend to preserve public confidence in and respect for the government represented."

It also states: "No official or employee shall request, use or permit use of any publicly owned or publicly supported property, vehicle, equipment, labor or service for the personal convenience or the private advantage of the official or employee or any other person."

It further states: "The best interests of the public require that any public official or employee found to be in violation of this ethics policy shall be subject to reprimand or other vote of no confidence, suspension, or discharge."

My question is: Is the Village Board of Bensenville going to examine the alleged activities of Bensenville Village Board Trustee, Hank Mandziara in regard to the violation of the Bensenville Village Board Ethics Ordinance concerning his alleged use of a state police database to run license plates of people working for the campaign of John Wassinger?

I am not a judge. If Mr. Mandziara is innocent of the alleged activities, then by all means move on; however, if Mr. Mandziara has made a mistake, then he has not preserved the public's confidence and the Village Board should follow its own Ethics Ordinance.

The second question is: What's the status of the lawsuit against the Village in regard to the fire fighter's pension fund?

The third: I had the opportunity to sit in on a Special Bensenville Intergovernmental Group (BIG) Meeting and the topic of contention was a small park called, Schuster Park. It seems the park was created through a number of funding vehicles, one of which was a federal grant. If the City of Chicago were to acquire this park for O'Hare expansion, it would have to relocate it somewhere else. I won't speak to that item as I see that a BIG Meeting topic is scheduled for later in this meeting. However, being a resident of Bensenville for over 11 years, now I have to be honest...I didn't know the piece of land they were arguing about actually had a name. It's actually a dumpy little park with park equipment that wouldn't be up to the standards of a 1950's Drive-In...If the Village is so worried about a little park at the end of Orchard Street near the townhouses, **then here's question three:** "Why doesn't the Village invest some money into the acquisition area to make it a more enjoyable place to live like a safe park then just buying homes?

The fourth question is: In regard to Item #9 on the Agenda, what is the Legal Defense Trust Fund and why does Elk Grove need money for it and how much money is the payment for?

Again, thank you for your time.

if a project is expected to exceed the NAAQS for any criteria air pollutant, then it must conduct more analysis, not less.[35]

None of the FAA's assertions about $PM_{2.5}$ in the Draft Evaluation justify its failure to further evaluate this pollutant in either its NEPA, NHPA Section 106, or Section 4(f)/6(f) evaluations.

C. FAA Mischaracterizes Schuster Park.

The Draft Evaluation identifies Schuster Park as both a 4(f) and 6(f) property. Section 6(f) of the Land and Water Conservation Fund Act, 16 U.S.C. § 4601-8(f)(3) establishes additional requirements with respect to 6(f) properties. Specifically, 6(f) property may not be converted from public outdoor recreational use without the approval of the Regional Directors of the National Park Service (NPS) (pursuant to delegation from the Secretary of Interior). This approval shall only be provided where the NPS provides that the conversion is "in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreational properties of at least equal fair market value and of reasonably equivalent usefulness and location."

In order to evaluate the equivalency of the usefulness and location of potential replacement properties for Schuster, it is critical to properly characterize

[35] *See* FAA Order 1050.1E, Appendix A, Section 2.2d ("If . . . there is potential for the proposed action to cause the area to exceed the NAAQS, then further consultation, analysis, and documentation will be required in an EA or EIS . . . .").

the purpose and use of the existing resource. The Draft Evaluation describes Schuster Park as follows:

> Based on the location of this park, its assets, and size, this park appears to be a neighborhood park. The residences in close proximity to the park, whose occupants are likely the primary users of this park, would be acquired under any of the Build Alternatives. Therefore, the location of the replacement property would not necessarily need to be located in close proximity to the current park location.[36]

The characterization of this park and the related legal conclusions with respect to the acceptable location of any replacement are incorrect. Schuster Park (and the adjacent parkland – Bretman Park – owned by the Village of Bensenville) is a significant recreational resource currently used by citizens residing throughout the Village of Bensenville, not just those that would be displaced by Build Alternatives. The Village of Bensenville has plans to upgrade Bretman Park with additional recreational facilities to make Bretman Park even more of a recreational resource for residents from throughout Bensenville. It is the Village's hope that under a cooperative relationship with the Bensenville Park District, the Bretman-Schuster complex will – even more than it is today – be one of the major recreational resources in Bensenville."

Accordingly, pursuant to 36 C.F.R. § 59.3(b)(3), any replacement for Schuster Park must meet the similar recreational needs (basketball, soccer, picnicking, playground, biking and significant open space), be located in at least a "reasonably equivalent location," be accessible by the same "user community," and also be

[36] Draft Evaluation at 3-4 and 4-3 to 4-4.

administered by the "same political jurisdiction as the converted property" (presumably either the Bensenville Park District or the Village of Bensenville itself).[37]

IV. Conclusion.

For the reasons presented above, the FAA's Draft Evaluation of 4(f) and 6(f) properties is fatally flawed and the FAA may not approve or permit the project to go forward.

Respectfully submitted,

Joseph V. Karaganis
KARAGANIS WHITE & MAGEL LTD
414 North Orleans Street
Chicago, Illinois 60610
(312) 836-1177

Counsel for St. John's United Church of Christ, Helen Runge, Shirley Steele, Rest Haven Cemetery Association, Robert Placek and Leroy Heinrich and Roxanne Mitchell

Robert E. Cohn
Latane Montague
Alexander Vander Bellen
Hogan & Hartson LLP
555 Thirteenth Street, NW
Washington, D.C. 20004
(202) 637-4999

Counsel for The Village of Bensenville and The Village of Elk Grove Village

[37] 36 C.F.R. § 59.3(b)(3)(iii). Although exceptions to the rule of locating replacement property close by the converted property are discussed in NPS regulations, Schuster Park, accurately described, would not fall within one of these exceptions.

BENSENVILLE PARK DISTRICT

July 29, 2005

Timothy A. Taylor
128 Orchard Avenue
Bensenville, Illinois 60106
(630) 595-1681

Dear Mr. Taylor,

Thank you for your attendance at our recent Board meeting. Below I have provided the answers to the questions you provided in writing.

- Has the Village of Bensenville approached the Bensenville Park District in regard to creating a Bretman-Schuster Complex?

  A: No

- If so, at what cost?

  A: See above.

- Would the Park District agree with the Village in its characterizations of Schuster and Bretman Parks?

  A: No

- Does the Park District agree with the FAA's characterization of Schuster Park?

  A: Yes

- Anyone know why the Village after not even two months after my original inquiry, has embraced the idea of improving not only Schuster Park, but Bretman Park, as well?

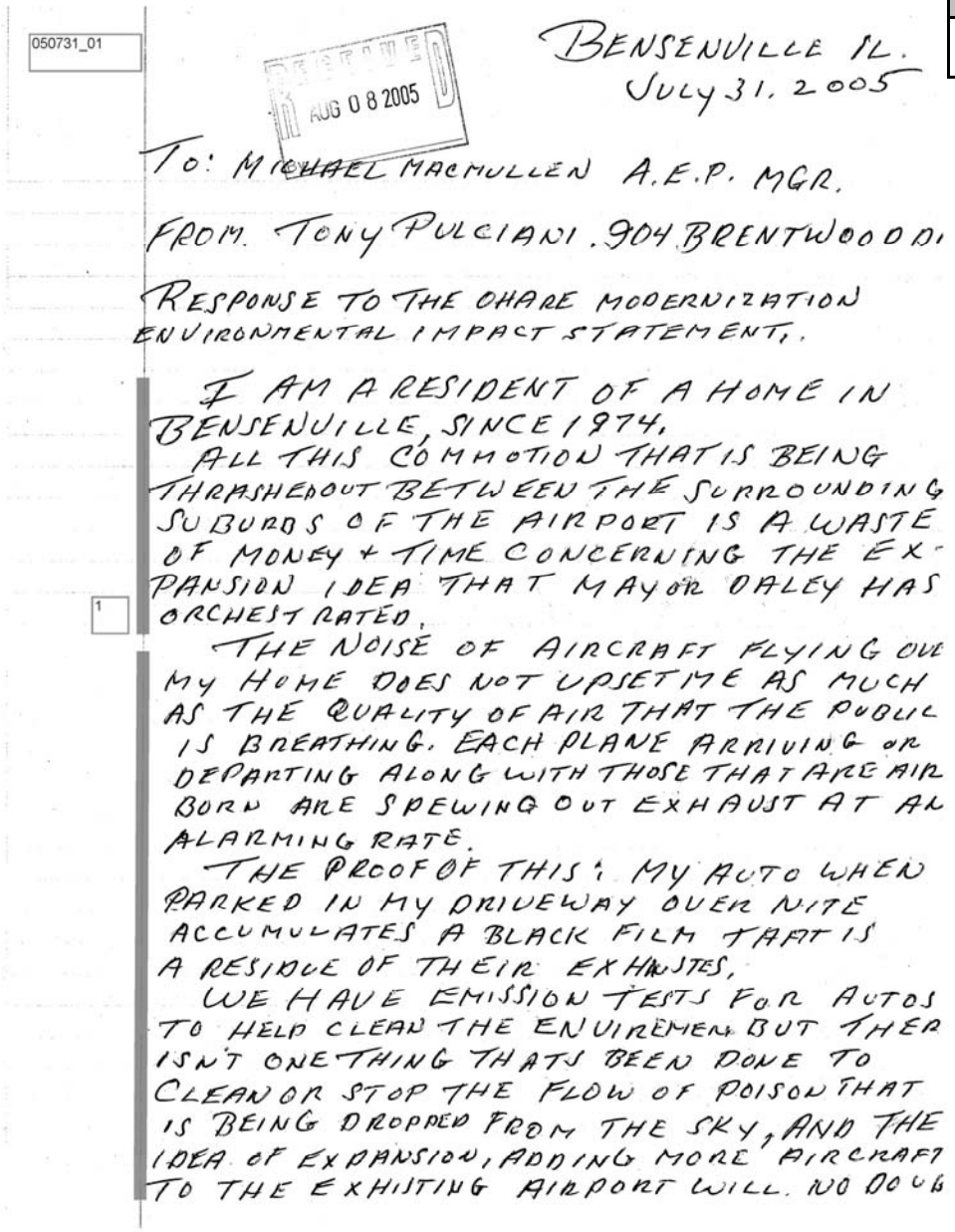
  A: As you know, this question answers itself.

Thank you again for your interest. Please feel free to contact me should you require further information.

Very truly yours,

Michael J. Benard
Director of Parks and Recreation

1000 W. Wood Street • Bensenville, IL 60106
Phone (630) 766-7015 • Fax (630) 766-9280
www.bensenvilleparkdistrict.org



050731_01

RECEIVED
AUG 08 2005

BENSENVILLE IL.
JULY 31, 2005

TO: MICHAEL MACMULLEN A.E.P. MGR.

FROM. TONY PULCIANI. 904 BRENTWOOD DR

RESPONSE TO THE OHARE MODERNIZATION ENVIRONMENTAL IMPACT STATEMENT.

I AM A RESIDENT OF A HOME IN BENSENVILLE, SINCE 1974.

ALL THIS COMMOTION THAT IS BEING THRASHED OUT BETWEEN THE SURROUNDING SUBURBS OF THE AIRPORT IS A WASTE OF MONEY + TIME CONCERNING THE EXPANSION IDEA THAT MAYOR DALEY HAS ORCHESTRATED.

THE NOISE OF AIRCRAFT FLYING OVE MY HOME DOES NOT UPSET ME AS MUCH AS THE QUALITY OF AIR THAT THE PUBLIC IS BREATHING. EACH PLANE ARRIVING OR DEPARTING ALONG WITH THOSE THAT ARE AIR BORN ARE SPEWING OUT EXHAUST AT AN ALARMING RATE.

THE PROOF OF THIS: MY AUTO WHEN PARKED IN MY DRIVEWAY OVER NITE ACCUMULATES A BLACK FILM THAT IS A RESIDUE OF THEIR EXHAUSTES,

WE HAVE EMISSION TESTS FOR AUTOS TO HELP CLEAN THE ENVIREMEN BUT THER ISN'T ONE THING THATS BEEN DONE TO CLEAN OR STOP THE FLOW OF POISON THAT IS BEING DROPPED FROM THE SKY, AND THE IDEA OF EXPANSION, ADDING MORE AIRCRAFT TO THE EXHISTING AIRPORT WILL NO DOUB

1

Comment	Response
1	Commenter's opinion is noted.

PUT AN ENORMOUS AMOUNT OF POLLUT
INTO THE ATMOSPHERE.
ALL I'VE HEARD FOR THE LAST FEW
YEARS SINCE THE EXPANSION IDEA WA
MENTIONED — MORE NOISE - TRAFFIC
CONGESTION - AND ALL OTHE REASONS
FOR A STOP TO EXPAND. NOT ONE IOTA
OF CLEAN AIR.
I HOPE THIS LETTER WILL OPEN
THE EYES OF THOSE WHO HAVE BEEN
LED TO BELIEVE THAT THE PROPOSED
2 EXPANSION IS A MIRACLE.

THANK YOU
Tony Pulciani

Comment	Response
2	The FAA notes the commenter's concern regarding air quality. The FAA did assess potential air quality impacts of the proposed project in Section 5.6 of the Final Environmental Impact Statement (Final EIS). Finally, the FAA directs the commenter to responses E-1 and E-3 beginning on page U.5-25 of Appendix U of the Final EIS.

050801_01

jean public
<joanpublic@yahoo.com>
08/01/2005 01:42 PM

To 9-AGL-600-OMPEIS/AGL/FAA@FAA
cc rodney.frelinghuysen@mail.house.gov
bcc
Subject public comment on noa of ohare modernization feis final section 4(f) and section 6(f) evaluation

i received a copy of this notice on 8/1/05.

attention mike macmullen - 2300 east devon avenue
desplaines il 60018 847 294 7046

after reading the information submitted to me, i object to the air pollution that will be caused by this use of ohare land. I object to the noise, danger and pollution of this project totally.

the folks at FAA seem to not understand that this world is finite. they seem to think they can keep loading our air with endless numbers of planes. this is against fact and is "pie in the sky".

faa is out of control. these are my comments on this noa that will be published in the federal register on or about july 29, 2005 per barry cooper, manager of the chicago area modernization program office.

faa unfortunately is in the grip of the aviation industry and pilots' associations and has no understanding of the negative impact on this world from aviation. we re all being poisoned by this industry
b. sachau
15 elm st
florham park nj 07932 1

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

Comment	Response
1	The commenter's opinions regarding the FAA are noted. The FAA also directs the commenter to Appendix U, Section U.5 of the Final EIS, which can be found in the beginning of Volume 9 of the Final Environmental Impact Statement (EIS). Specifically, the FAA directs the commenter to responses A-1 (page U.5-2), C-7 (page U.5-20), D-1 (page U.5-21), E-1 (page U.5-25), and M-1 (page U.5-46). In addition, the FAA notes that the commenter's previous emails and FAA's respective references to responses can be found in Appendix L on page L-92 and Appendix J on page J-353.

050801_02

Dear Michael W MacMullen,
My name is John T Gerir
I live on Runway 27L in Norridge
so this is busiest arrival runway
at night. I have retired from Post
Office since Dec of 2001 have
had dry eyes which could be
attributed to quality of air around
here. I have been to eye doctors
at University of Illinois Chicago they
said could environment were I
live. [1] You better explain to
me how United and American
can pay for airport if losing
money! I am a stock holder
in UAL. [2] Security is very
lax at perimeter of airports. [3]

Sincerly You
John T Garn

708-457-1935
708-457-0708

RECEIVED
AUG 01 2005
By______

Comment	Response
1	The FAA notes the commenter's concern regarding air quality. The FAA did assess potential air quality impacts of the proposed project in Section 5.6 and Appendix J of the Final Environmental Impact Statement (Final EIS). Finally, the FAA directs the commenter to responses E-1 and E-3 beginning on page U.5-25 of Appendix U of the Final EIS.
2	The FAA notes the commenter's concern regarding the funding of the project given the financial state of both American Airlines and United Airlines. In response to similar comments received on the Draft EIS, the FAA presented further information on its review of the cost estimate and the financial feasibility of the proposal in the Final EIS in Chapter 1, Section 1.7. FAA has concluded that it is reasonable to assume that, based upon the impact O'Hare has on the Chicago region, as well as the NAS, and the benefits to the regional economy, there will be sufficient funds to complete the City's proposal. With regard to the effect of the bankruptcy of airlines, the FAA notes that the Agency has conducted a sensitivity assessment of the financing plan for the OMP, including a what-if scenario involving the loss of a hubbing carrier at O'Hare. This sensitivity assessment examined a number of mechanisms the City could employ should part of the funding for the project not be implemented as planned. These mechanisms include deferral of improvements, use of contingency, increased debt issuance, and short-term borrowing. The sensitivity assessment demonstrated that changes in cost per enplaned passenger resulting from the use of these mechanisms would not be substantial and in some instances could be offset by cost benefits from the project's implementation.
3	The FAA notes the commenter's opinion regarding perimeter airport security. The FAA notes that the Transportation Security Administration (TSA) whose mission is the protection of the nation's transportation service, is part of the review of the Airport Layout Plan submitted by the City of Chicago for FAA review. The TSA, along with the City of Chicago, are responsible for the airport's perimeter security.

050801_03

Jim Paganis
<jpaganis@nmlp.com>
08/01/2005 02:38 PM

To 9-AGL-600-OMPEIS/AGL/FAA@FAA
cc
bcc
Subject O'Hare Expansion

Mr. Michael W. MacMullen

Our company owns four industrial properties surrounding O'Hare. I have a future airport layout plan which was issued in October 2003. I do not know if this 2003 plan is still valid. Does your agency have such a plan which shows what Chicago will be purchasing or which properties will not be included in the expansion plan? Or do you have any idea where I may obtain such a layout? 1

Thank you,

James Paganis
National Material L.P.
1965 Pratt Blvd.
Elk Grove Village, Illinois 60007
jpaganis@nmlp.com

Comment	Response
1	The FAA did respond to this commenter by phone to address Mr. Paganis' concerns. The property acquisition lines have not changed from their delineation in the October 2003 Airport Layout Plan (ALP). The FAA directs the commenter to aerial exhibits of the land acquisition area in Section 5.4 of the Final Environmental Impact Statement (Final EIS), specifically Exhibits 5.4-4 (Elk Grove and Des Plaines) and 5.4-5 (Bensenville). In addition, the FAA strongly recommends that the commenter contact the City of Chicago's Land Acquisition Program office at 773-686-4600. The ALP submitted by the City of Chicago in October 2003 has undergone a comprehensive aeronautical study by all FAA lines of business plus the Transportation Security Administration. Each office contributed to this review focusing on compliance with FAA Advisory Circulars, Regulations, Orders and Policy Guidance. Since October 2003 the FAA has worked with the City of Chicago in an iterative process to resolve minor technical issues associated with the ALP. This coordination resulted in the City resubmitting a revised ALP in September 2005. The modifications made to the ALP between October 2003 and September 2005 were minor in nature and did not impact how the airfield would be operated or the operational efficiency. In addition, changes on the Final ALP would not result in any differences in the environmental consequences portion of the EIS. The City of Chicago's ALP drawings are available on the FAA's web site at the following address: http://www.agl.faa.gov/OMP/Planning/ALP/ALP.htm

050801_04

Walter McElligott
<wmcauth07@juno.com>
08/01/2005 06:29 PM

To 9-AGL-600-OMPEIS/AGL/FAA@FAA
cc
bcc
Subject Environmental Program Manager

Michael W. MacMullen, Airports Environmental Program Manager,
Federal Aviation Administration, Chicago Airports District Office,
2300 East Devon Avenue, Des Plaines, IL 60018.
Telephone: 847-294-8339, FAX: 847-294-7046,
e-mail address: ompeis@faa.gov.

Dear Mr. MacMullen:

Congratulations to your office for the hard work done in reaching a position to Issue the "Federal Register Notice of the Availability for the O'Hare Modernization Final Environmental Impact Statement..., Evaluation, and Final General Conformity Determination, Chicago O'Hare International Airport, Chicago, IL," on July 20, 2005. 1

My wife & i re just two of many concerned residents of Eastern Will County (EWC), Illinois who have spent the last 21 years (1984-2005) hiding in fear from the Illinois Dept. of Transportation (IDOT) & its hired help. Secretary Martin EWC has told our farmers how by the state & its cronies, who have spent more than $100 million on landbanking property plan to proceed. Feeling their oats from the 5-4 US. Supreme Ct. decision KELO V. CT. IDOT will bring landowners to court & "take" all of the remaining 4200 acres they require for an airport (yet to be approved by your office) of more than the size of O'Hare after its modernization. In the meantime, they offer a pittance for some of the last, best farmland in the midwest as compared to what is being paid for neighboring property.

Over two decades, Illinois has well-learned how to threaten EWC citizens, young & old & fool authorities with falsified reports that make this region appear to be the best place for construction of a "third" regional airport that is actually a sixth airport in the Great Lakes region. The negative aspects of a South Suburban Airport (SSA) in EWC, Illinois, which seem to have been completely ignored by three Illinois governors (Edgar, Ryan, Blagojevich), 5 US. Senators (Durbin, Dixon & Fitzgerald, both retired, Obama, McCain (R-Ariz.), five Congressman (Hastert, Hyde, Jackson, Weller), & numerous members of the state assembly. Hopefully, this Federal Register Notice on O'Hare, shows that the FAA has not allowed itself to be hoodwinked by IDOT.

In January 16, 2005, FAA officials, reviewing the "necessity" for Chicago's third regional airport generally referred to as the South Suburban Airport near Peotone further distorted the picture by returning the Greater Milwaukee Mitchell International Airport (GMIA) to the fray by introducing seven daily Amtrak trains between Chicago and Milwaukee, Wisconsin.

Although Edgar left office without an airport deal, he did receive correspondence from the CEOs of sixteen major airlines that concluded that they would not utilize an SSA, even if it was built by the state. Edgar's desk was barely clean before his successor, George Ryan had proposed his Illinois FIRST infrastructure program, a major portion of which was a $75 million set-aside for a real estate and landbanking

Comment	Response
1	Comment noted.

scheme for 24,000 acres of farmland between Beecher, Monee and Peotone. Ryan would pursue the hapless SSA throughout all four years of the only term he would serve as governor. Not until Ryan decided to not seek a second tenure did the "lame duck" executive capitulate to Chicago's Mayor Richard M. Daley in an effort to secure the regional airport that never would be linked to his political legacy. Eventually, Daley and Ryan reached agreement with regard to the present six billion dollar expansion of Chicago's O'Hare International Airport, which incorporated a reduced SSA proposal. Concerning the Daley/Ryan accord, even former governor Edgar said, "Daley definitely got much more...''

If the FAA determines that the Peotone region shold need charter flights, I'm sure you know Gary/Chicago airport is only thirty five miles away. Additionally, passenger service is once again off the ground in Rockford, a mere 60 miles from O'Hare, where locals say there is no need to spend federal dollars to build a new airport. Furthermore, for the FAA to develop another expensive airport of questionable value after giving your tacit approval to O'Hare expansion would, IMHO, be fiscally irresponsible.

Regardless of whether the SSA near Peotone move forward with a private-public partnership that would not require tax dollars, as Rep. Jackson proposes, the FAA's recent comments make such continuing efforts meaningless & frustrating to all. 2

Walt
May God Bless You & Yours
Walter (Joan) McElligott P. O. Box 452, Beecher, IL 60401
Official writer of "Sarchasm,"gulf between author of sarcastic wit & person who doesn't get it."[from 2005 Washington Post Mensa Invitational]
.
Editor of Chicago Writers' Assoc. (CWA) CLARION monthly Newsletter, next issue due 8/1/2005==========

Comment	Response
2	The FAA notes the commenter's opposition to the proposed South Suburban Airport and appreciates the input. Currently, the FAA is conducting an Environmental Impact Statement (EIS) for the proposed South Suburban Airport. Comments regarding the South Suburban EIS can be submitted to the FAA at:http://environmental.southsuburbanairport.com/

050802_01

Happywife9@aol.com
08/02/2005 01:29 PM

To 9-AGL-600-OMPEIS/AGL/FAA@FAA
cc
bcc
Subject O'HARE EXPANSION

TO WHOM IT MAY CONCERN:

WE ARE IN RECEIPT OF YOUR MEMO DATE JULY 27, 2005, REGARDING THE O'HARE EXPANSION, WHICH OUR FAMILY IS TOTALLY AGAINST.

WE LIVE IN THE WOOD DALE AREA & HAVE BEEN TO ALL THE FORUMS, ETC. AND HAVE HEARD THE PROS & CONS AND WE STILL WILL FIGHT NOT TO HAVE THIS EXPANSION TAKE PLACE.

THE MEMO WE RECEIVED NEEDS A PHILADELPHIA LAWYER TO INTERPRET WHAT THE WRITER IS TRYING TO TELL US.....HOW ABOUT SENDING SOMETHING IN "PLAIN ENGLISH"?

THANK YOU..... SINCERELY, sobieski7@aol.com

1

Comment	Response
1	The FAA notes the commenter's opposition to the project.

050802_02

8/2/05

Dear Mr. MacMullen,

I am writing in response to this Chicago Tribune 8/2/05... (see article at right, below)

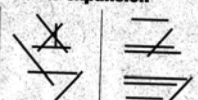
1) Where is the money for this expansion project at O'Hare?
Before this expansion starts, the bulk of the money (90-95%) should already be in a special interest-bearing account! Piecemeal $ won't fly!!
Why would anyone be so foolish to begin a project w/o the funds; and, not just a stipend amount to start & when that gets used up... then, well, we they'll push the "emergency button" (so-to-speak) and panic 'cause there's no more money, but, this project is already on & supposedly it's the point of no return. 1

2) Does O'Hare really need to be renovated/revamped? Actually, it should have been built the right ways (ie: runways) way long ago (vs) this 4-year-old scribbled-runway-disaster that is being used at present! My opinion.
So, yes, the new runways are definitely a good idea given the high fuel cost, as well as labor cost, etc... 2

(over

How FAA sees O'Hare expansion

The FAA's final Environmental Impact Statement compares Chicago's expansion plan to O'Hare's current configuration. Here are some key differences.



	Existing runways	Proposed
65+ DNL noise impacts*		
• Housing units affected	5,199	6,754
• Population affected	14,512	19,577
Average annual delay *(Minutes per operation, in 2018)*	17.1	5.8
Annual flights (in 2018)	974,000	1,194,000
Delay cost to the airlines (millions) *In 2018, based on $25 per minute of delay*	$416.4	$173.1

** 65 DNL is a federal measurement of yearly average day-night levels of noise near airports. If you live in an area that would be above the 65 DNL threshold after O'Hare were expanded, then Chicago would have to pay for noise mitigation at your house or neighborhood schools.*

Source: Federal Aviation Administration

DAILY HERALD

ment of Transportation's inspector general for underestimating the project's costs.

FAA spokesman Tony Molinaro said the inspector general's report looked only at the city's basic financial plan and found it adequate. A separate analysis of

Mayors promise a court fight

By Sue Ter Maat
Daily Herald Staff Writer

Suburban leaders vowed Thursday to stop Chicago from taking suburban land after the Federal Aviation Administration issued an environmental report that moves Chicago closer to expanding O'Hare International Airport.

In a news conference at the Elk Grove Village municipal hall, Elk Grove Village Mayor Craig Johnson and Bensenville Village President John Geils said the suburbs would initiate legal action if Chicago tries to take their towns' land.

Suburban attorneys declined to comment on exactly when or what legal action would be taken. But leaders were very clear that no land would be acquired by Chicago without their day in court.

"They will not bulldoze Elk Grove Village and Bensenville," Johnson said. "We have the law on our side, and we will act at the appropriate time."

Johnson and Geils pointed to a recently released federal review that questioned the funding availability of the expansion project as proof O'Hare will be a multibillion-dollar failure.

"We know Mayor Daley will try to use this report (the FAA's) as justification to bring in bulldozers, just as he did at Meigs Field, and start destroying homes, businesses and communities," said Johnson in a statement. "He would do this without being able to say how much the expansion will cost and where they'll find the money. Indeed, based on the evidence we have seen, the money will not be there."

Bensenville cemeteries will be another obstacle for Chicago, said Joe Karaganis, attorney for the Suburban O'Hare Commission. Karaganis said the federal law protects both cemeteries.

"They are ignoring religious rights," Karaganis said. "They are in direct violation (of the First Amendment)."

To submit comments

The FAA is accepting public comments on the final Environmental Impact Statement's sections on air quality, alternatives, environmental justice and mitigation, and the Religious Freedom Restoration Act until 5 p.m. Sept. 6. Send comments:

By fax to (847) 294-7046.

By e-mail to OMPEIS@faa.gov.

By mail to Michael W. MacMullen, Airports Environmental Program Manager, Federal Aviation Administration, 2300 Devon Ave., Des Plaines, IL, 60018.

Source: Federal Aviation Administration

Comment	Response
1	The FAA notes the commenter's concern regarding the funding of the project. In response to similar comments received on the Draft EIS, the FAA presented further information on its review of the financial feasibility of the proposal in the Final EIS in Chapter 1, Section 1.7. FAA has concluded that it is reasonable to assume that, based upon the impact O'Hare has on the Chicago region, as well as the National Airspace System, and the benefits to the regional economy, there will be sufficient funds to complete the City's proposal. The FAA further notes that it is not unusual for the funding to not be earmarked in its entirety prior to the outset of construction. For large airport improvement projects, it is common for the project to be built and financed in phases as is the case with this project.
2	Comment noted.

4) I strongly recommend that the Air Traffic Controllers be asked for their inputs on the taxi-way layouts & locations, etc... along with other important + key air traffic ground movements for a smooth coming & going, on an ongoing/regular basis!! I think, way too often, those who are "working-the-job(s)" are left out of ideas + plannings... why? I don't know). Maybe because the politicians, big business fat cats, etc... want all the control (s) cause they supposedly know best ?!?! I say, look at all the previous & current messes... given poor Q+A + past reportings, etc.... and, not just aviation-related. 3

3) Environmentally: Noise, Air Pollutions, etc... it's a great cause for concern + implement, but, the damage(s) are already done when it comes to pollutions of our air + the ozone layer.(*) As far as noise, the jet engine manufactures must do a better job w/ noise from those jet engines... especially the existing ones currently used on older aged jets (all makes & models). Junk or store-in-the-desert those jets & engines that make (and always will, no matter what; if not revamped) way too much noise! 4

(*)→ There should have been stricter & faster + for jets → revamping of same, decades ago knowing the growth + expansion coming in future!!

Also, the smaller jets (ie: CRJ's, etc... smaller than MD80's + 727's + 737's) should not be at O'hare.(**) These jets service smaller cities, anyway. They might be better used or located at airports like DuPage or Palwaukee.

(**)→ there's way too many at O'hare; my opinion. O'hare should be for the big jets & jumbos (ala Airbus, etc...). 5

Expand & extend the Elgin O'hare expressway to the DuPage Airport... for transportation ease & conveniences and to board/fly on CRJ's, etc... DuPage is a decent size airport (w/ land + lands-surrounding), and, is strategically located among lots of people-populations (convenience, too).

DuPage is a better idea than, a Peotone. The O'hare Expansion is a better plan, than Peotone. The bulk of the populations in Chicago & suburbs are more strategically & conveniently located to O'hare, Midway, DuPage, Palwaukee & even Gary airports. 6

Lastly, talk about "pollutions of the environment" (and, noises) and waste of high-priced gasoline (and, will be going higher: I predict oil (barrels) price-wise will be $100+ per barrel). Far fetched? We'll see. So, what about conservation?? Why travel farther, longer + endure more traffic jams (in + to Peotone) when we have airports already built, located + operating?! Just make 'em more efficient + do it w/ a sharper-pencil (so to speak). 7

4) The O'hare Cemeteries... the respect for the dead will always be there, & a cemetery is the right place for that & to be at + in to mourn lost/loved-ones.

Comment	Response
3	See topical responses K-1 and K-2 in Appendix U of the Final EIS, beginning on page U.5-42.
4	The FAA notes the commenter's concern regarding air pollution and noise impact. Both the potential noise and air quality impacts were assessed as part of the Environmental Impact Statement (EIS). The assessment of noise can be found in Section 5.1 of the EIS; the assessment of potential air quality impacts of the proposed project can be found in Section 5.6 of the EIS.
5	The FAA notes the comments regarding the fleet mix utilized at O'Hare. However, the FAA does not have the authority to dictate which airplanes air carriers utilize at O'Hare.
6	The commenter's suggestion for the extension of the Elgin-O'Hare Expressway to DuPage Airport is noted. However, the extension of the Elgin O'Hare Expressway was not part of any of the Build Alternatives considered within the EIS. The Elgin-O'Hare Expressway project is part of the Chicago Area Transportation Study 2030 Regional Transportation Plan, but has yet to be programmed by IDOT. It would extend the Elgin-O'Hare Expressway from its existing east terminus at I-290 to the proposed west access to O'Hare, by converting existing Thorndale Avenue from a DuPage County arterial route to a limited access freeway. This project has the potential to lessen some of the potential impacts of the alternatives occurring along York Road, Irving Park Road, and Thorndale Avenue. The FAA considered this projects in the cumulative impacts assessment which can be found in Chapter 6 of the EIS. FAA also notes the commenter's preference for O'Hare expansion or the use of the DuPage airport over the proposed South Suburban airport.
7	Comment noted.

4) — So, I suggest that those cemeteries at O'hare be relocated to available farmlands west of York Road somewhere in the rural areas of Thorndale or Devon. And, make these cemeteries beautiful, landscape wise & layout wise. Honor the dead w/ respect (100%) as well as those families who ~~are~~ will visit them, in future. Make the new ~~cemetery~~ or cemeteries [illegible] consolidate the two, into one? But design it the right way(s).... Afterthought; relocate them to another existing-cemetery, but, these relocated graves have a very special area strictly for them & w/ boundary(ies) & recognition(s), etc. And, Chicago foots the bill for ongoing maintenance/landscaping/upkeeps, etc.... 8

—END—

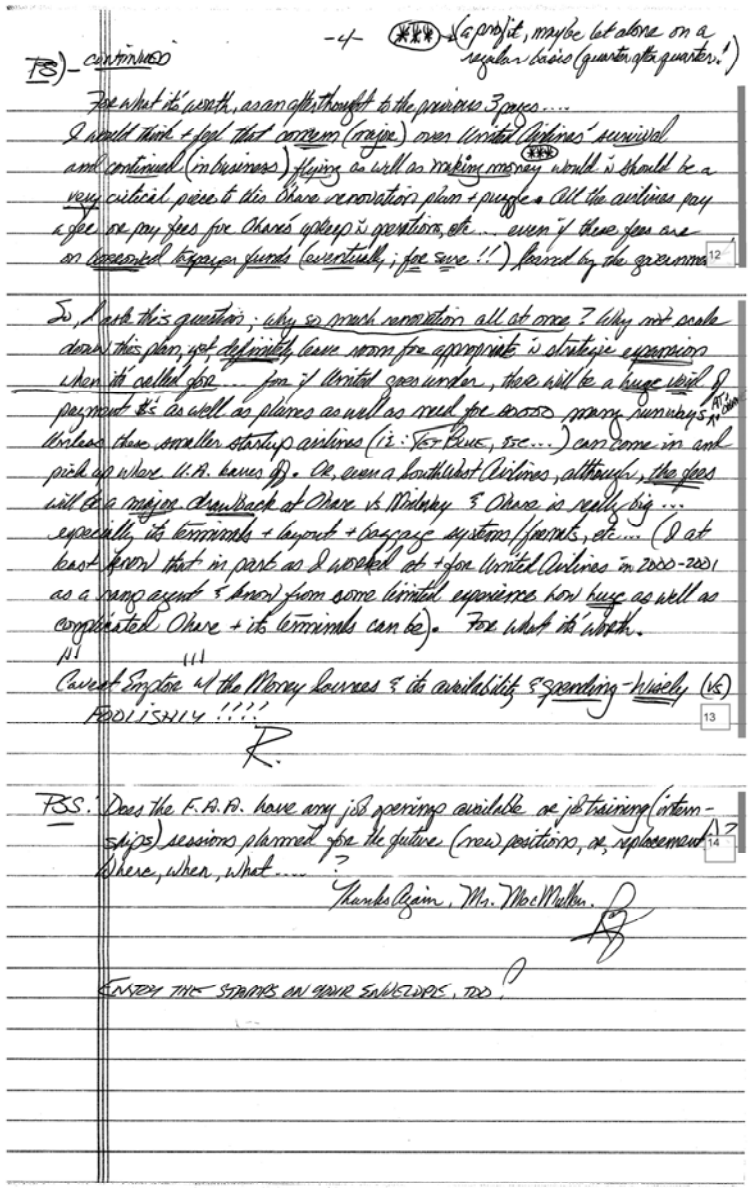
Michael, everyone either wants "no expansion or full speed ahead expansion." Those days in court will come, but, reality is: O'hare is destined to and will expand... better planning as well as better (cautious) spending plans [frugal + maybe even conservative], AND, most important: watch the waste & watch who gets those big $ renovation(s)-contracts @ O'hare, etc... dished out by Chicago (or, Mayor Daley & company; respectfully stated & submitted!).
→ given the recent accusations & arrests, etc... w/in the Mayor's Admin-offices + officers, etc.... and, it sounds like there's more to come; ... see + hear. 9

If Mayor Johnson + Village President Geils are waving the red flag(s) regarding "THE MONEY, THE MONEY, THE MONEY" — where is it + where's it coming from, etc..." this is very valid! To begin this O'hare renovation + expansion w/o $'s in hand or on account is very very foolish & dollar crazy. Of course, there's always "The Taxpayers"... who will once again have to ante up given the politicians' + fat-cats' greed in planning as well as spend... spend... spending! And, I for one am not interested in permitting or continuing: "BIG-BUSINESS, AS USUAL"!!!!, AND, 10
"BIG-WASTE & MIS-SPENDING/MISMANAGEMENT, AS USUAL"!!!
Let's all try to get this done w/o a lot of lawsuits & court costs most of which will be footed by (again →), The Taxpayer! But, nothing is started until the money/funds is secured (guaranteed; NO "BS-promises", etc....) 11

Respectfully Submitted + Stated,
Roy Sonntag
12C Walker Place
PO Box 981
Elgin, Ill 60120

[illegible]

Comment	Response
8	FAA notes the commenter' suggestion that the two cemeteries be relocated to a new cemetery in the vicinity of Thorndale and Devon or that they be relocated to an existing cemetery. The FAA notes that decisions related to the location of reinterment and payment of expenses are identified in the Memorandum of Agreement included as Appendix B of this Record of Decision.
9	Comment noted.
10	The FAA notes the commenter's concern regarding the funding of the project. The FAA directs the commenter to Section 1.7 of the Final EIS.
11	Comment noted.



PS)- continued

-4- (***) (a profit, maybe let alone on a regular basis (quarter after quarter!)

For what it's worth, as an afterthought to the previous 3 pages....
I would think + feel that concern (major) over United Airlines' survival and continual (in business) flying as well as making money would & should be a very critical piece to this Ohare renovation plan + puzzle. All the airlines pay a fee or pay fees for Ohare's upkeep & operations, etc.... even if these fees are or increased taxpayer funds (eventually; for sure!!) levied by the government. 12

So, I ask this question: why so much renovation all at once? Why not scale down this plan, yet definitely leave room for appropriate & strategic expansion when it's called for.... for if United goes under, there will be a huge void of payment $'s as well as planes as well as need for so many runways at Ohare. Unless these smaller startup airlines (i.e.: JetBlue, etc....) can come in and pick up where U.A. leaves off. Or, even a Southwest Airlines, although, the fees will be a major drawback at Ohare vs Midway & Ohare is really big... especially its terminals + layout + baggage systems (trams, etc.... (I at least know that in part as I worked at + for United Airlines in 2000-2001 as a ramp agent & know from some limited experience how huge as well as complicated Ohare + its terminals can be). For what it's worth.

!!! !!!

Caveat Emptor w/ the Money Sources & its availability & spending - wisely (vs) FOOLISHLY !!!!

R.

PPS: Does the F.A.A. have any job openings available or job training (internships) sessions planned for the future (new) positions, or, replacement? Where, when, what.... ? 14

Thanks Again, Ms. MacMullen.

ENJOY THE STAMPS ON YOUR ENVELOPE, TOO!

Comment	Response
12	Comment noted.
13	The commenter's suggestion that the project should be implemented in phases is noted. In fact, the project is planned to be implemented in two main phases. For further information on the phasing of the project, please see Section 5.20 of the EIS.
14	Regarding job openings at the FAA, please see the following website: http://www.faa.gov/jobs/

050805_01

August 5, 2005

Michael W. MacMullen, Airports Environmental Program Manager
Federal Aviation Administration , Chicago Airports District Office
200 East Devon Avenue
Des Plaines, IL, 60018

Sir:

The O'hara Modernization Final Environmental Impact Statement is meaningless. The expansion of this airport is financially unsound and accomplishes nothing. Why the FAA would make this study wasting Taxpayer's money is beyond my comprehension. This is just another example of Government bureaucracy out of control by making decisions without considering all the pertinent facts. I know you are apparently so committed to this worthless project that you will not have the courage to make the right decisions. Thank God we have the courts to overturn this stupidity. 1

Lawrence J. Mulholland
1065 Cypress Lane
Elk Grove Village Il. 60007

Comment	Response
1	The commenter's opposition to the project is noted.

050806_01

"Lehman, Mike Anthony"
<mlehma1@uic.edu>
08/06/2005 02:02 PM

To 9-AGL-600-OMPEIS/AGL/FAA@FAA
cc kbrubaker@elpc.org, high-speed-rail@lists.elpc.org, rick.harnish@midwesthsr.org
bcc
Subject Bullet train concept alternative for FAA

Mr MacMullen and Mr Cooper,

Please see attchments concerning an alternative transport mode to airport expansions that would utilize Chicago/Gary Airport.
Thanks, Mike

mike lehman
4600 n clarendon, #1211
chicago, il 60640
tel. 773-334-6080


Bullet Train, Bullet Points.doc

GL HSR letter.doc

GREAT LAKES HSR Cities.JPG

HSR chicago to philadelphia.doc

TRIP TIME FROM CHICAGO TO MAJOR EAST COAST CITIES BY AIR.doc

TRANSPORTATION TO CHICAGO AIRPORTS.doc

1

Comment	Response
1	The FAA appreciates the commenter's information regarding high-speed rail as an alternative to airport improvement projects. The FAA carefully evaluated the use of other modes of transportation, including high-speed rail, as an alternative to O'Hare improvements. However, this alternative did not meet the purpose and need. For further information, please see Chapter 3, Section 3.2.2.2 of the Final Environmental Impact Statement (Final EIS).

"Bullet Train" "bullet points" in favor of the technology

-Use of **cleaner** more **manageable** and **efficient, potentially renewable** electric power

-Reduces demand for **foreign oil**, uses domestic energy sources

-Safest mode of transportation, evidenced by French and Japanese HSR systems/models

-Reduces road congestions compared to the airline transport mode auto dependency

-Encourages use of city rail transit systems in **"reverse commutes"**

-Most logistically logical/efficient mode of inter-city travel for **NE quarter of US**

-Steel wheel/rail operation equals less road/rail infrastructure breakdown/maintenance

-Use of underutilized existing **ROW/rail infrastructure**

-Similar **travel times** to airplanes for NE quarter of US

-Helps to bring **Amtrak** to be profitable, interconnected, and useful to other routes

-Stops need to build even more **airport capacity** in several cities along bullet train route

-Most passenger pleasant and **city/transit friendly** mode of transportation

-CBD bullet train destinations and virtually no congestion, or pollution creation

-City rail lines/branches/ROW etc. are **grade separated** well already for bullet train use

-There is **abundant air and road** infrastructures in the US, now rail needs to **progress**

- Electrified rail systems have similar fixed costs to other modes regarding vehicles and infrastructure but **variable costs** are much less-fuel, service, maintenance etc...

***The private sector has shown a lot of interest in operating a bullet train system in the USA in a public/private partnership.**

****Federal matching funds for infrastructure projects count the worth of existing infrastructure/ ROW(which bullet trains use) toward a local community's contribution to a proposed project as the local funding match.**

THE 1st TRUE HIGH SPEED RAIL SYSTEM/"BULLET TRAIN" FOR THE USA

Please distribute this concept with attachments to your HSR contacts and transportation legislators, I'm trying to receive feedback and economic and political support, thanks(to: mikelehman@lycos.com). Advanced countries are implementing "true" High Speed Rail/HSR systems and the US is earnestly trying to also; of the many concepts proposed, the Great Lakes HSR/GLHSR system should be the **one built**. Many millions of people would be able to use the system and even more benefit from it's numerous advantages.

I've received positive reviews relative to this concept from academics, consultants, the rail industry and others. This is **not** the Midwest HSR initiative, rather, another transportation choice/mode, a separate dedicated "true" HSR / "bullet train" system. The Great Lakes to North East US regions=25% of all US inter-city travel by road and air.

The benefits of the outstanding safety records(no deaths on similar decades old Shinkansen or TGV HSR systems), non-reliance on oil(electric powered), less pollution(air and noise), and less road congestion the GLHSR system offers outweigh the initial startup costs and land expropriations necessary for this new HSR system.

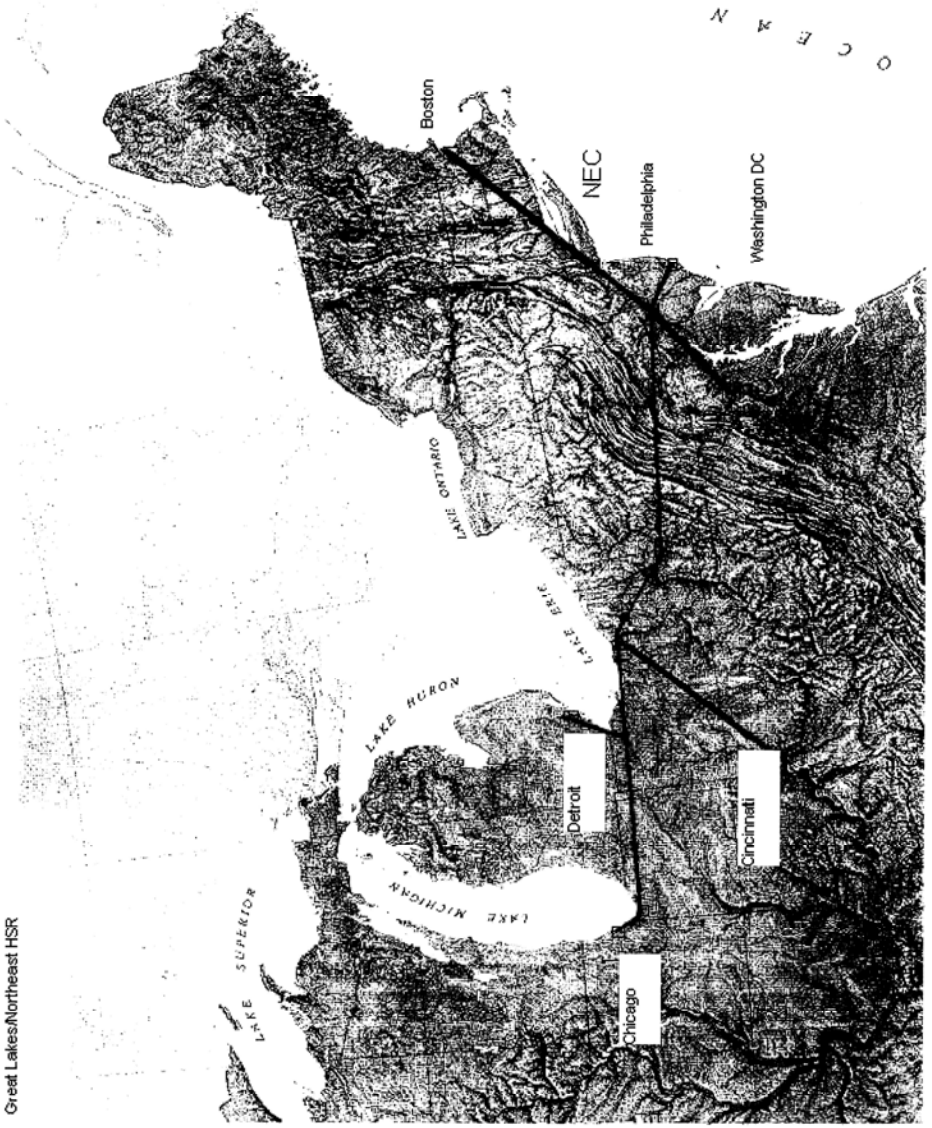
Commercial jets expel thousands of gallons of petroleum exhaust into the atmosphere and create dreadful amounts of noise(HSR uses domestic coal and other alternative electric power and is much quieter). Ohare airport generates thousands of additional traffic congesting and polluting vehicles daily-not a concern with the Great Lakes/GLHSR central business district/CBD or current Northeast HSR corridor/NEC CBD destinations.

Astoundingly!, estimates of life expectancy of people that live within several miles of a major airport is reduced by 6 or more years due to toxic airplane emissions. In Illinois, it's also reported that the air pollution created by Ohare airport alone is greater than all electric power plants in the state combined! HSR is a good alternative to more airplanes.

The GLHSR system would displace over 2 billion gallons of fuel a year(500,000 flights), relying on alternative energies. In addition, a new airport consumes double the land that the entire GLHSR system concept would, 15,000 vs. 7,000 acres. Lastly, discount airlines with multiple airplane/airport transfers per route have longer travel times in the Northeast quarter of the US than most GL/NEC HSR route travel times.

The Great Lakes HSR corridor would connect **45 major US city pairs** and hence, many intercity passengers while other proposed HSR systems/concepts connect only about a **dozen** or so major city pairs. In the Northeast and Great Lakes corridors there are about 1-2 billion individual intercity trips annually, consequently, the 40 million trips a year estimated for the GLHSR system seems very attainable. There is existing infrastructure throughout Pennsylvania to facilitate HSR travel amid the mountains there-the major concern in adaptation of this HSR concept. The time is now to build **true** HSR.

Regards,
Mike Lehman
mikelehman@lycos.com, 773-334-6080



Justification of a dedicated TGV High Speed Rail line between Chicago and Philadelphia Great Lakes(GLHSR) on to DC/NYC

This is a concept for an exciting, strategic and practical HSR "bullet train"/TGV type project. The TGV is the HSR design-system in France that uses both "dedicated", and also existing(in major cities) infrastructures and track/ROW. The economic, security, and transportation/health reasons for this **new dedicated** HSR line is partly national in scope but would be mostly for servicing the states of Illinois through to New Jersey(population total of 60 million); connecting the cities of Chicago, Gary, Cleveland, Pittsburgh, Harrisburg, and Philadelphia, however other states and cities would benefit and link/connect to it also. Detroit and Cincinnati(Ohio) are also individual HSR/TGV line origon-destination points(total US HSR city populations are over 90 million).

The Great Lakes(GLHSR) mode could carry in excess of 40 million passengers a year, drawing travelers from air and bus but mostly automobile modes in addition to acquiring induced new travelers. Over the expected hundred year or more life of the GLHSR line the large initial capital investments would prove to be very productive. In contrast, present value costs and subsidies of the above mentioned cities' air transport, interstates and highways were far more expensive than what this new HSR route's cost would be.

40 million GLHSR passengers a year is equivalent to about 1/3 of commercial aviation enplanements in the Great Lakes/Northeast corridor cities of the over 600 million a year domestic enplanements in the US. In Japan(pop. 120 million) HSR usage is over 130 million trips/year; in France(pop. 55 million) HSR usage is over 20 million trips/year.

Extra states and cities would benefit by their link to **Acela/Northeast corridor**/(NEC) service or by other modes to the city stations mentioned above, including ones connected radially to Chicago by conventional trains. The overall population reach serviced by both the GL and NEC HSR systems combined is well over 120 million people in 18 states- **3 times the TGV population sum!** Philadelphia would be the logistic hub where Great Lakes HSR corridor trains would meet the Northeast HSR corridor and either terminate there or continue on, alternating either northbound to NYC/Boston or southbound to Baltimore/Washington DC, or, even perhaps east to Atlantic City/the Atlantic Ocean.

This proposal will apt to be very unpopular with air and road transportation related industries/lobbies (9 of the 10 largest companies worldwide either produce autos or petroleum products); nevertheless, it shouldn't be since **additional railroad capacity** alleviates some of their modes' problems also. Hopefully progress and rationale will prevail and this **new** transportation mode can develop and thrive despite other interests.

1

ECONOMIC REASONS FOR HSR (also, alternative jet fuels aren't available, TGV/HSR is all electric using domestic coal and other domestic energy sources)

1. The new GLHSR system linking to the Northeast corridor/NEC interconnects more than 20 culture rich cities; 7 of the 10 largest and most important in the US. The new line would travel from Great Lakes cities through the Alleghany Mountains on to Philadelphia, New York City, Washington DC and the rest of the Northeast HSR(NEC/Acela) cities.

2. There would be new job creation generated by construction and then for continual operation and maintenance of the GLHSR route(also, new jobs in CBDs). Rider ship levels should reach and exceed the levels of the French TGV ultimately. The French TGV has over 20 million trips a year with revenues amounting to over $2 billion a year.

3. With possible revenues of $4 billion or more a year, the large investment in this line's infrastructure and trainsets would be paid for realistically within several years time, similar to the French TGV experience with their revenue streams financing and funding.

4. This new HSR route would augment and strengthen AMTRAK abilities and potential elsewhere on complementary routes and that of the Northeast corridor/Acela. Acela/NEC HSR utilization continues to grow and is AMTRAK'S most profitable and busiest route.

5. HSR travel mode would enhance cities' CBDs and integrated rail developments there. Proposed connected cities; Chicago, Cleveland, Pittsburg, and Philadelphia have and are expanding upon their own internal transit rail systems-cities not entirely reliant on autos!

SECURITY REASONS (HSR trains could evacuate an entire large city in 1-2 days)

1. The airline transportation mode is more favored for future terrorist attacks(hijackings, bombings, sabotage, poisonings etc.) Assaults are not as likely nor as catastrophic with the HSR transportation mode, insurance companies and the public would welcome this.

2. In the advent of an airspace shutdown again or bad weather the HSR corridors would serve as another travel alternative to air/road travel in the northeast US and Great Lakes.

3. New HSR mode of transport wouldn't call for the necessary extreme expense and problems of security systems and additional equipment like the airline mode requires.

MOBILITY/HEALTH REASONS (HSR<10% the energy use of like air travel)

1. Every year in the US, tragically, about 50,000 people die and many thousands more are permanently disabled from roadway related accidents(less driving=less deaths); in France and Japan, HSR hasn't had a fatality in over 60 years total. Hundreds of more people are killed and severely injured yearly in aircraft crashes also. Scores of people and millions of dollars would be saved using alternative HSR in lieu of personal vehicles and airplanes.

2. Most HSR right of way could be built adjacent to existing highways and rail lines for environmental considerations and land use purposes(aircraft and road vehicles create much more **noise** and **air** pollutions); HSR land expropriations will likely be inevitable.

3. Over **1/3** of all Americans don't like to fly, therefore leaving long, congesting, costly and hazardous auto/bus modes or intricate AMTRAK schedules as their only alternatives.

4. Airport traffic creates more pollutions/congestions around large population centers. There are potentially a total of 8 congestion adding auto trips to and from airports to pickup and drop-off a flyer at both destinations. Combination rail to walking travel modes are always superior and healthier to alternative airplane to automobile modes.

5. The new dedicated TGV HSR line would travel the 750 mile Chicago to Philadelphia length in 4-5 hours at the 186+ mph speeds capable (which approaches short jet plane trip speeds), with only 3 stops in between (Cleveland, Pittsburg, and Harrisburg). Continuing on to DC, NYC or Atlantic City would add another 1-2 hours to the total overall length departing the Chicago/Gary station eastbound. Airport **alternative analyses** are needed.

6. This new mode of travel would be especially relaxing and enjoyable. The ability to personally move about, enjoy views (especially in Pennsylvania), work, talk, eat and rest in a hassle-free, safe vehicle like a bullet train is unsurpassed. Indeed, elderly and ADA citizens would probably prefer this option to auto, bus and airplane travel too.

BENEFITS TO INDIVIDUAL STATES (GLHSR reduces airports' congestions also)
(connected cities CBDs will add significant tourist, business, and personal trip activity)

Illinois
The western end point of the GLHSR corridor linking downtown Chicago by HSR to over **100 million** people and **13** states. Chicago and Gary are positioned to reach another **30 million** connecting travelers by all modes from adjoining states to the GLHSR system. GLHSR helps solve the problem of airport expansions and eases roadway congestions too!

Indiana
Gary, IN; the US geographic/transportation pinch point that filters most traffic east and west. Gary/Chicago airport/region development and increased usage of the South Shore Railroad infrastructure. The suburban Gary/Chicago HSR station would have multi-modal connections; airlines, commuter and HSR rail and major interstate highways.

Ohio/Michigan (GLHSR trains, **dual purpose** as transit trains in **Cincinnati** and **Detroit**)
The midpoint of the GLHSR corridor between Chicago and Philadelphia with additional connections originating from Detroit and also Columbus and Cincinnati into Cleveland.

Pennsylvania
Economic development of Pittsburgh and Philadelphia CBDs and the connection to the Pennsylvania capitol of Harrisburg which is also positioned in the state's mountain resort areas along with many other tourist attractions. The advantages of **two** US HSR systems.
*Transportation is the leading cause of accidental/preventable deaths in the US.
**GLHSR system would be a prudent, comfortable and safe railway of essential mobility that half the US could access, utilize and appreciate-a vital investment. The US should embrace developing and engineering this efficient, alternative transportation technology.

TRIP TIME FROM CHICAGO TO MAJOR EAST COAST CITIES BY AIR or potential HSR, "bullet trains"
New York, Philadelphia, Baltimore, Washington

Fixed times: Round trip

Flight time, 4 hours
Walk time, from parking, through terminal, 2 hours
Check-in time, 2 hours
Security check time, 2 hours
Baggage claim time, 2 hours

Variable times: Round trip

Flight connection time, 2-4 hours
Delay time, 1-2 hours
Car rental processing time, 2 hours
Commute/Transit/Congestion time, 2-4 hours

Total roundtrip times in transport:

Low estimate: 10 hours
High estimate: 24 hours

TGV/GLHSR to NECHSR Travel Times from Chicago(bullet trains): Round trip

Total roundtrip times in transport: Assumes 5 hour trip to Philadelphia/NYC CBDs from Chicago and use of 30 minute rail transit travel to CBD's HSR/bullet train terminals, not street vehicles transit. Intermediate cities; Detroit, Cleveland and Pittsburgh, would have only about 3 hour travel times to the extreme cities both eastbound and westbound.

Low estimate: 10 hours
High estimate: 18-20 hours to other NEC cities

Changes for overall commercial airplane travel times/service since 9/11:

-Fuel price increases, financial problems for air carriers, bankrupt airlines, restructuring airlines/routes, poorer level of service
-Longer waits, more security issues, more hassles, access problems, difficult parking, auto congestion/waiting/parking
-Terrorism fears, real or imagined

Observations:

Airplane flights are relatively short but the commuting and management of the pre and post flight matters/preparations are becoming longer time-wise and are expensive(no matter what the discount airlines advertise-there are several hidden costs) . "Reverse commutes" could be employed by CTA/Metra rail to the Chicago CBD for connections to the GLHSR system to make inter-city travel connections quicker and easier.

With 5 minute headways and 500 passenger "bullet trains", the GLHSR system could carry over 60 million passengers a year in all directions combined(1000 passenger trains-the size of three 747s could carry double the amount). The GLHSR system would be a bona fide "land cruiser" or, depending upon how you look at it; the fastest, longest year-round roller coaster in the country-and a journey through great American history!

To prove just how important the GLHSR corridor really is, the longest continuous interstate toll roads in the US are along the exact same corridor. US transportation and Amtrak need and deserve a second Acela-type system-the GLHSR "bullet train".

Over 200,000,000 vehicles arrive and leave Chicago from Interstates 90, 94, 294 and Rt. 41 a year of over 1 billion trips a year total in the Chicago area(all Interstates). The origination and direction of that travel is from northern Indiana and points east.

The total traffic from personal vehicles, buses, trains and airplanes from points east arriving to/leaving Chicago is about 300,000,000/year, of that amount, probably 40 million or more could use the GRHSR bullet train as a transport choice. Rail transport infrastructure as a substitute for increasingly more personal vehicle traffic is a suitable and wise investment of the public's money.

Unfortunately it's said that one shared ROW HSR train traveling on existing freight railroad track/ROW, consumes 5 times the spacing/blockage of a standard freight train. This fact alone could be the main stumbling point of going forward with this type of HSR plan and consequently the problem of moving forward with the Midwest HSR Initiative.

Conclusion:

The whole Great Lakes region would improve as an area in livability, access and businesses establishment and Chicago and other cities; Detroit, Pittsburgh, Cleveland etc. would add to the ranks of "world class" cities with HSR connections. The Amish love trains and much of the ROW necessary for this concept covers Amish area, so they would need access and would welcome the system.

Gary/Chicago Airport-"bullet train" station has easy connections to 4 different modes of passenger and freight transport; 2 Interstate highways, the South Shore commuter railway, Amtrak and freight railways, Lake Michigan water transport and the airport itself.

TRANSPORTATION/TRANSIT TO AND FROM CHICAGO AIRPORTS

Ohare: 33 million enplanements a year, 50% connecting-no transit
(17 million Chicago arrivals and 17 million Chicago departures a year)

Midway: 9 million enplanements a year, 25% connecting-no transit
(7 million Chicago arrivals and 7 million Chicago departures a year)

-www.bts.gov

Potential and Estimated Airport Transport/Transit by All Modes

POTENTIAL PERSONAL VEHICLE TRANSIT/PARKING
-2 transit trips per flight, 13.5/Midway, 33/Ohare million potential air passenger trips.

18 MILLION air passenger/**12 MILLION** vehicle ESTIMATED TRIPS A YEAR
-4 million/Ohare and 2 million/Midway parked cars a year(1.5 per car)
-Standard Parking Inc., 2005
(11% of transit traffic)

POTENTIAL PERSONAL VEHICLE TRANSIT/PASSENGER(pick-up/drop-off)
-4 transit trips per flight, 27/Midway, 66/Ohare million potential air passenger trips.

13 MILLION air passenger/**52 MILLION** vehicle ESTIMATED TRIPS A YEAR
(45% of transit traffic)

POTENTIAL TAXI/LIMO TRANSIT
-1 transit trip per flight, 6.75/Midway, 16.5/Ohare million potential air passenger trips.

5 MILLION air passenger/**3.5 MILLION** vehicle ESTIMATED TRIPS A YEAR
-10,000 a cars a day/2 direction=5 million taxi/limo trips a year-both airports(1.5 per car).
-Ground Transportation Dept., Ohare Airport, 2005
(3% of transit traffic)

POTENTIAL RENTAL CAR TRANSIT
-2 transit trips per flight, 13.5/Midway, 33/Ohare million potential air passenger trips.

8 MILLION air passenger/**5 MILLION** vehicle ESTIMATED TRIPS A YEAR
-50,000 cars a week, 2.5 million cars/4 million air passengers a year(1.5 per car)
-Avis Corporation, 2005
(4% of transit traffic)

CTA RAIL TRANSIT/Entrances to Airports at CTA rail stations
-No road transit trips per flight, 10% of CTA riders are air passengers
Blue Line/Ohare-3 million passengers/entrants a year to CTA rail station
Orange Line/Midway-2.5 million passengers/entrants a year to CTA rail station

1 MILLION ESTIMATED TRIPS/BY AIRLINE PASSENGERS, 2 AIRPORTS
-CTA 2004 Rail Ridership
(1% of transit traffic)

REGIONAL BUS-METRA SERVICE TRANSIT
- Less than 1 transit trip per flight, totals much less than 1 trip per flight

1 MILLION ESTIMATED TRIPS/BY AIRLINE PASSENGERS, 2 AIRPORTS
-Ground Transportation Dept., Ohare Airport, 2005

HOTEL/LOCAL BUS TRANSIT
-2 transit trips per flight, totals less than 2 trips per flight

2 MILLION ESTIMATED TRIPS/BY AIRLINE PASSENGERS, 2 AIRPORTS
-Chicago Hotel and Convention Bureau, 2005
(2% of transit traffic)

TOTAL AIRPORT ROAD TRANSIT TRIPS ANNUALLY/BOTH AIRPORTS

Personal/other vehicles: 71/75 million
Airplane passengers: 48 million arriving and leaving
Airport employees/services vehicles: 40 million arriving and leaving
(Airports employee traffic equals 100,000/daily-both airports/both directions-equals -33% of transit traffic, 2% arrive and leave by CTA orange and blue lines)
100% Total %

GRAND TOTAL VEHICLE TRIPS ANNUALLY/BOTH AIRPORTS
115 million arriving and leaving airports

Daily Interstate Highway Traffic to Chicago Airports/Both directions combined

Ohare

I-90
From NW 134,300 vehicles
From SE 171,100 vehicles

I-294
From South 159,400
From North 106,900

Midway

I-55
From SW 121,400
From NE 166,800
-www.gis.dot.il.gov
Annual Average Daily Traffic, IDOT

Observations

The total vehicle trips to and from both airports by airline passengers from all modes of transport besides CTA rail and all buses is about 75 million vehicles per year or about 200,000 per day(assumes 1.5 passenger per vehicle). Transit with personal vehicle, taxi, limo, and rental car may have more than one airplane passenger per trip to/from airports.

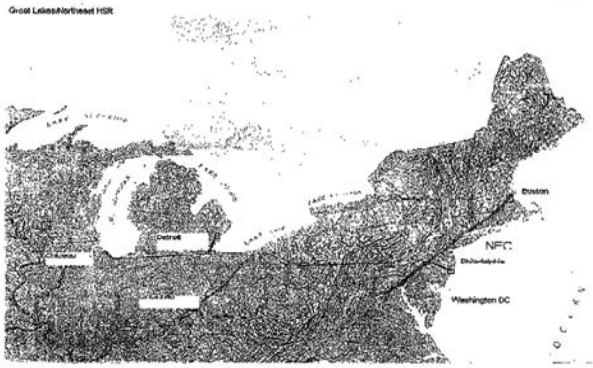
There are about 50,000 employees at Ohare and 15,000 at Midway. 50 million annual and 100,000 daily total vehicle trips for airport employees and other services trips are estimates to be added to both the airports' road transit totals. CTA rail; blue and orange lines, equal 11 million transit trips a year to and from the airports, mostly non-airplane passenger transit customers but probably airport employees(90%).

Ohare and Midway airports would be responsible for more than ¼ of all highway traffic on I-90, I-294 and I-55; 250,000(est.) of 850,000 daily vehicle trips in close proximity to the airports(91,000,000 of 310,000,000 yearly).

FROM : MIKE LEHMAN PHONE 773-334-6080 FAX NO. : 773 334 6080 Aug. 08 2005 10:31AM P1

050808_01

AIRPORT EXPANSIONS ALTERNATIVE



mike lehman
mlehrna1@uic.edu

1

Regards,
Mike Lehman
mikelehman@lycos.com, 773-334-6080

Comment	Response
1	The FAA appreciates the commenter's information regarding high-speed rail as an alternative to airport improvement projects. The FAA carefully evaluated the use of other modes of transportation, including high-speed rail, as an alternative to O'Hare improvements. However, this alternative did not meet the purpose and need. For further information, please see Chapter 3, Section 3.2.2.2 of the Final Environmental Impact Statement (Final EIS).

FROM : MIKE LEHMAN PHONE 773-334-6080 FAX NO. : 773 334 6080 Aug. 08 2005 10:36AM P1

"Bullet Train" "bullet points" in favor of the technology

-Use of **cleaner** more **manageable** and **efficient, potentially renewable** electric power

-Reduces demand for **foreign oil**, uses domestic energy sources

-Safest mode of transportation, evidenced by French and Japanese HSR systems/models

-Reduces road congestions compared to the airline transport mode auto dependency

-Encourages use of city rail transit systems in **"reverse commutes"**

-Most logistically logical/efficient mode of inter-city travel for **NE quarter of US**

-Steel wheel/rail operation equals less road/rail infrastructure breakdown/maintenance

-Use of underutilized existing **ROW/rail infrastructure**

-Similar **travel times** to airplanes for NE quarter of US

-Helps to bring **Amtrak** to be profitable, interconnected, and useful to other routes

-Stops need to build even more **airport capacity** in several cities along bullet train route

-Most passenger pleasant and **city/transit friendly** mode of transportation

-CBD bullet train destinations and virtually no congestion, or pollution creation

-City rail lines/branches/ROW etc. are **grade separated** well already for bullet train use

-There is **abundant air and road** infrastructures in the US, now rail needs to **progress**

- - Electrified rail systems have similar fixed costs to other modes regarding vehicles and infrastructure but marginal costs are much less-fuel, service etc...

***Curiously, two rail agencies in the US that rely on electric rather than oil based energy for transportation are on the brink of bankruptcy, AMTRAK and the CTA.**

****Federal match funds for infrastructure projects counts the worth of existing infrastructure/ ROW(which bullet trains use) toward a local community's contribution to a proposed project as the local funding match.**

FROM : MIKE LEHMAN PHONE 773-334-6080 FAX NO. : 773 334 6080 Aug. 08 2005 10:36AM P2

THE 1st TRUE HIGH SPEED RAIL SYSTEM/"BULLET TRAIN" FOR THE USA

Please distribute this concept with attachments to your HSR contacts and transportation legislators, I'm trying to receive feedback and economic and political support, thanks(to: mikelehman@lycos.com). Advanced countries are implementing "true" High Speed Rail/HSR systems and the US is earnestly trying to also; of the many concepts proposed, the Great Lakes HSR/GLHSR system should be the **one built**. Many millions of people would be able to use the system and even more benefit from it's numerous advantages.

I've received positive reviews relative to this concept from academics, consultants, the rail industry and others. This is **not** the Midwest HSR initiative, rather, another transportation choice/mode, a separate dedicated "true" HSR / "bullet train" system. The Great Lakes to North East US regions=25% of all US inter-city travel by road and air.

The benefits of the outstanding safety records(no deaths on similar decades old Shinkansen or TGV HSR systems), non-reliance on oil(electric powered), less pollution(air and noise), and less road congestion the GLHSR system offers out weigh the initial startup costs and land expropriations necessary for this new HSR system.

Commercial jets expel thousands of gallons of petroleum exhaust into the atmosphere and create dreadful amounts of noise(HSR uses domestic coal and other alternative electric power and is much quieter). Ohare airport generates thousands of additional traffic congesting and polluting vehicles daily-not a concern with the Great Lakes/GLHSR central business district/CBD or current Northeast HSR corridor/NEC CBD destinations.

Astoundingly!, estimates of life expectancy of people that live within several miles of a major airport is reduced by 6 or more years due to toxic airplane emissions. In Illinois, it's also reported that the air pollution created by Ohare airport alone is greater than all electric power plants in the state combined! HSR is a good alternative to more airplanes.

The GLHSR system would displace over 2 billion gallons of fuel a year(500,000 flights), relying on alternative energies. In addition, a new airport consumes double the land that the entire GLHSR system concept would, 15,000 vs. 7,000 acres. Lastly, discount airlines with multiple airplane/airport transfers per route have longer travel times in the Northeast quarter of the US than most GL/NEC HSR route travel times.

The Great Lakes HSR corridor would connect **45 major US city pairs** and hence, many intercity passengers while other proposed HSR systems/concepts connect only about a **dozen** or so major city pairs. In the Northeast and Great Lakes corridors there are about 1-2 billion individual intercity trips annually, consequently, the 40 million trips a year estimated for the GLHSR system seems very attainable. There is existing infrastructure throughout Pennsylvania to facilitate HSR travel amid the mountains there-the major concern in adaptation of this HSR concept. The time is now to build **true** HSR.

Regards,
Mike Lehman
mikelehman@lycos.com, 773-334-6080

FROM : MIKE LEHMAN PHONE 773-334-6080 FAX NO. : 773 334 6080 Aug. 08 2005 10:37AM P3

Justification of a dedicated TGV High Speed Rail line between Chicago and Philadelphia Great Lakes(GLHSR) on to DC/NYC

This is a concept for an exciting, strategic and practical HSR "bullet train"/TGV type project. The TGV is the HSR design-system in France that uses both "dedicated", and also existing(in major cities) infrastructures and track/ROW. The economic, security, and transportation/health reasons for this **new dedicated** HSR line is partly national in scope but would be mostly for servicing the states of Illinois through to New Jersey(population total of 60 million); connecting the cities of Chicago, Gary, Cleveland, Pittsburgh, Harrisburg, and Philadelphia, however other states and cities would benefit and link/connect to it also. Detroit and Cincinnati(Ohio) are also individual HSR/TGV line origon-destination points(total US HSR city populations are over 90 million).

The Great Lakes(GLHSR) mode could carry in excess of 40 million passengers a year, drawing travelers from air and bus but mostly automobile modes in addition to acquiring induced new travelers. Over the future hundred year or more life of the GLHSR line the large initial capital investments would prove to be very productive. In contrast, present value costs and subsidies of the above mentioned cities' air transport, interstates and highways were far more expensive than what this new HSR route's cost would be.

40 million GLHSR passengers a year is equivalent to about 1/3 of commercial aviation enplanements in the Great Lakes/Northeast corridor cities of the over 600 million a year domestic enplanements in the US. In Japan(pop. 120 million) HSR usage is over 130 million trips/year; in France(pop. 55 million) HSR usage is over 20 million trips/year.

Extra states and cities would benefit by their link to **Acela/Northeast corridor**/(NEC) service or by other modes to the city stations mentioned above, including ones connected radially to Chicago by conventional trains. The overall population reach serviced by both the GL and NEC HSR systems combined is well over 120 million people in 18 states- **3 times the TGV population sum!** Philadelphia would be the logistic hub where Great Lakes HSR corridor trains would meet the Northeast HSR corridor and either terminate there or continue on, alternating either northbound to NYC/Boston or southbound to Baltimore/Washington DC, or, even perhaps east to Atlantic City/the Atlantic Ocean.

This proposal will apt to be very unpopular with air and road transportation related industries/lobbies (9 of the 10 largest companies worldwide either produce autos or petroleum products); nevertheless, it shouldn't be since **additional railroad capacity** alleviates some of their modes' problems also. Hopefully progress and rationale will prevail and this **new** transportation mode can develop and thrive despite other interests.

FROM : MIKE LEHMAN PHONE 773-334-6080 FAX NO. : 773 334 6080 Aug. 08 2005 10:48AM P1

ECONOMIC REASONS FOR HSR (also, alternative jet fuels aren't available, TGV/HSR is all electric using domestic coal and other domestic energy sources)

1. The new GLHSR system linking to the Northeast corridor/NEC interconnects more than 20 culture rich cities; 7 of the 10 largest and most important in the US. The new line would travel from Great Lakes cities through the Alleghany Mountains on to Philadelphia, New York City, Washington DC and the rest of the Northeast HSR(NEC/Acela) cities.

2. There would be new job creation generated by construction and then for continual operation and maintenance of the GLHSR route(also, new jobs in CBDs). Rider ship levels should reach and exceed the levels of the French TGV ultimately. The French TGV has over 20 million trips a year with revenues amounting to over $2 billion a year.

3. With possible revenues of $4 billion or more a year, the large investment in this line's infrastructure and trainsets would be paid for realistically within several years time, similar to the French TGV experience with their revenue streams financing and funding.

4. This new HSR route would augment and strengthen AMTRAK abilities and potential elsewhere on complementary routes and that of the Northeast corridor/Acela. Acela/NEC HSR utilization continues to grow and is AMTRAK'S most profitable and busiest route.

5. HSR travel mode would enhance cities' CBDs and integrated rail developments there. Proposed connected cities; Chicago, Cleveland, Pittsburg, and Philadelphia have and are expanding upon their own internal transit rail systems-cities not entirely reliant on autos!

SECURITY REASONS (HSR trains could evacuate an entire large city in 1-2 days)

1. The airline transportation mode is more favored for future terrorist attacks(hijackings, bombings, sabotage, poisonings etc.) Assaults are not as likely nor as catastrophic with the HSR transportation mode, insurance companies and the public would welcome this.

2. In the advent of an airspace shutdown again or bad weather the HSR corridors would serve as another travel alternative to air/road travel in the northeast US and Great Lakes.

3. New HSR mode of transport wouldn't call for the necessary extreme expense and problems of security systems and additional equipment like the airline mode requires.

MOBILITY/HEALTH REASONS (HSR<10% the energy use of like air travel)

1. Every year in the US, tragically, about 50,000 people die and many thousands more are permanently disabled from roadway related accidents(less driving=less deaths); in France and Japan, HSR hasn't had a fatality in over 60 years total. Hundreds of more people are killed and severely injured yearly in aircraft crashes also. Scores of people and millions of dollars would be saved using alternative HSR in lieu of personal vehicles and airplanes.

2. Most HSR right of way could be built adjacent to existing highways and rail lines for environmental considerations and land use purposes(aircraft and road vehicles create much more **noise** and **air** pollutions); HSR land expropriations will likely be inevitable.

3. Over **1/3** of all Americans don't like to fly, therefore leaving long, congesting, costly and hazardous auto/bus modes or intricate AMTRAK schedules as their only alternatives.

4. Airport traffic creates more pollutions/congestions around large population centers. There are potentially a total of 8 congestion adding auto trips to and from airports to pickup and drop-off a flyer at both destinations. Combination rail to walking travel modes are always superior and healthier to alternative airplane to automobile modes.

5. The new dedicated TGV HSR line would travel the 750 mile Chicago to Philadelphia length in 4-5 hours at the 186+ mph speeds capable (which approaches short jet plane trip speeds), with only 3 stops in between (Cleveland, Pittsburg, and Harrisburg). Continuing on to DC, NYC or Atlantic City would add another 1-2 hours to the total overall length departing the Chicago/Gary station eastbound. Airport **alternative analyses** are needed.

6. This new mode of travel would be especially relaxing and enjoyable. The ability to personally move about, enjoy views (especially in Pennsylvania), work, talk, eat and rest in a hassle-free, safe vehicle like a bullet train is unsurpassed. Indeed, elderly and ADA citizens would probably prefer this option to auto, bus and airplane travel too.

BENEFITS TO INDIVIDUAL STATES (GLHSR reduces airports' congestions also)
(connected cities CBDs will add significant tourist, business, and personal trip activity)

Illinois
The western end point of the GLHSR corridor linking downtown Chicago by HSR to over **100 million** people and **13** states. Chicago and Gary are positioned to reach another **30 million** connecting travelers by all modes from adjoining states to the GLHSR system. GLHSR helps solve the problem of airport expansions and eases roadway congestions too!

Indiana
Gary, IN; the US geographic/transportation pinch point that filters most traffic east and west. Gary/Chicago airport/region development and increased usage of the South Shore Railroad infrastructure. The suburban Gary/Chicago HSR station would have multi-modal connections; airlines, commuter and HSR rail and major interstate highways.

Ohio/Michigan (GLHSR trains, **dual purpose** as transit trains in **Cincinnati** and **Detroit**)
The midpoint of the GLHSR corridor between Chicago and Philadelphia with additional connections originating from Detroit and also Columbus and Cincinnati into Cleveland.

Pennsylvania
Economic development of Pittsburgh and Philadelphia CBDs and the connection to the Pennsylvania capitol of Harrisburg which is also positioned in the state's mountain resort areas along with many other tourist attractions. The advantages of **two** US HSR systems.
*Transportation is the leading cause of accidental/preventable deaths in the US.
**GLHSR system would be a prudent, comfortable and safe railway of essential mobility that half the US could access, utilize and appreciate-a vital investment. The US should embrace developing and engineering this efficient, alternative transportation technology.

3

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**GLHSR system would be a prudent, comfortable and safe railway of essential mobility that half the US could access, utilize and appreciate-a vital investment. The US should embrace developing and engineering this efficient, alternative transportation technology.

3

050811_02

Mike MacMullen
Federal Aviation Administration
2300 E Devon Ave
Desplaines, ILL 60018

Dear Sir or Madam:

Reg: Notice of Availability of O'Hare Modernization Final Environmental Impact Statement, Final Section 4(f) and section 6(f) Evaluation, And Final General Conformity Determination

In reference to the above my comments are as follow:

1) Whenever, there is community developments, there is always hindrances in Developments from the public, because thoughts are not matched with each other. If government stops working, listening their emotional, sympathetic comments government will not be successful in projects developments. But at the same time Government body should definitely take care of the public, whether they are getting the right compensation back, for what they are going to loose. If they get the right compensation, public will keep quiet and development is quite possibly straight. 1

2) Bensenville town homes price value could not go up due to Airport Expansion program since many years' people are hearing an airport expansion. Now the town homes of three bedrooms set in other nearby area is more than $200,000.00(two hundred thousands dollars). If owners of the town homes do not get matching prices, they will cry definitely. If they get the matching prices no body will hold a sign "Stop O'Hare Air Port Expension"in his hands. Therefore, pay them right amount of compensations. 2

3) Bensenville Town homes are the same units pay to everybody equal amount of price after matching the prices with the nearby area plus moving expenses instead of wasting the time in appraisals etc. For example price of nearby town homes is $240,000.00 Plus $6000.00 moving expenses. You can set this one Flat price. 3

Thanking you,

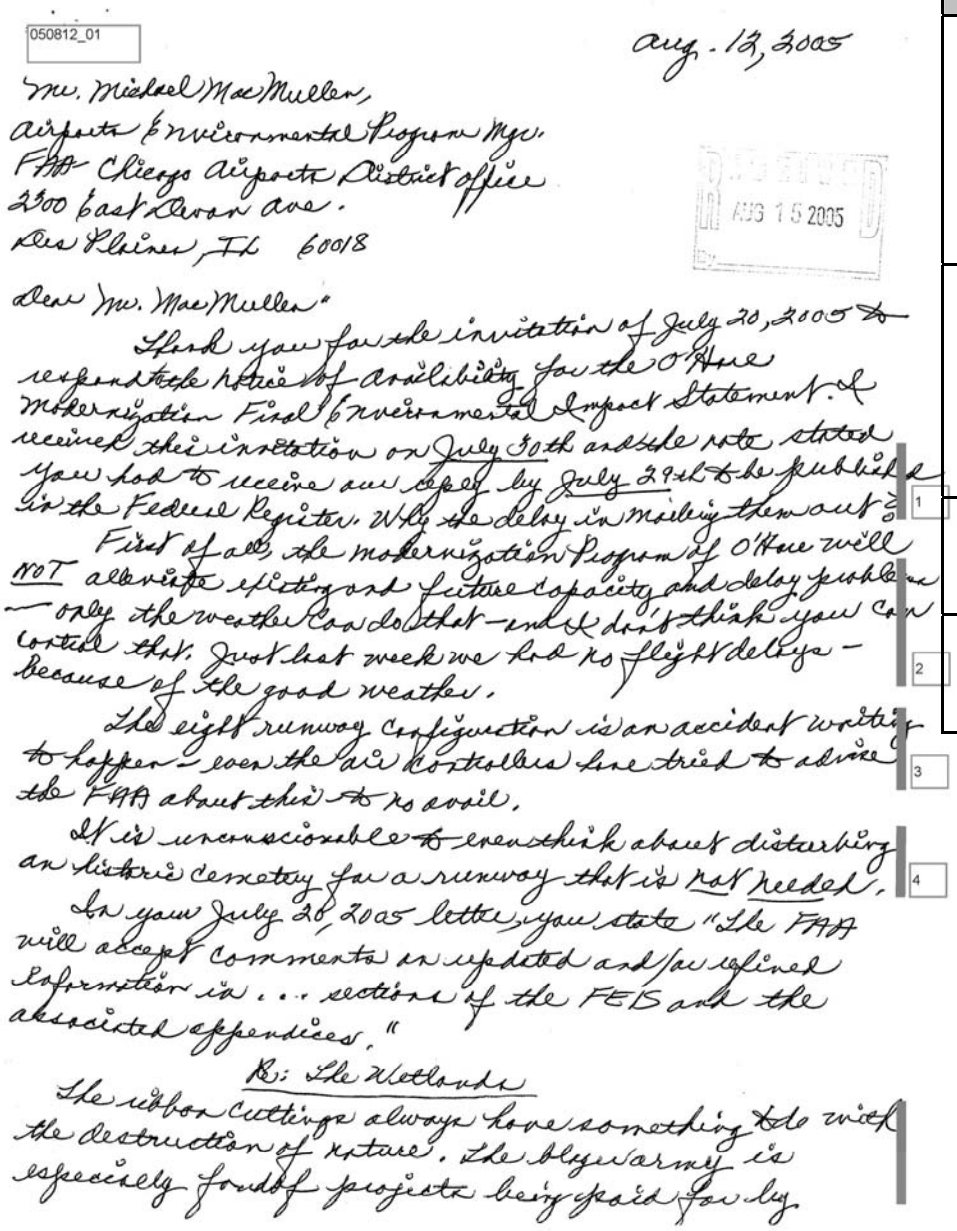
Yours truly,

Malkiat Palaha

Malkiat S. Palaha
36 Sun Set Court
Bensenville, IL 60106
Phone # 630-422-1092

Dated: August 11, 2005

Comment	Response
1	Comment noted.
2	The FAA takes seriously the potential impacts related to homeowners and businesses in the proposed land acquisition areas and areas adjacent thereto. Any acquisition by the City of Chicago requires full compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act). The Uniform Act is a Federal statute that regulates the acquisition and relocation process and protects the interests of residents and business owners affected by the potential acquisitions. Owners, tenants, and businesses in the proposed acquisition areas would be relocated pursuant to both the Uniform Act and *FAA's Advisory Circular AC150/5100-17, Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects*. In addition, the FAA is aware of the resident's concerns that the sale price established for their existing property (fair market value) would be insufficient to provide for purchase of comparable property in a new location. The Just Compensation clause of the Fifth Amendment to the United States Constitution along with provisions within the Uniform Act provide mechanisms to address these concerns. Also see topical response G-4 on page U.5-34 of Appendix U of the Final Environmental Impact Statement (Final EIS).
3	The Uniform Act ensures the homeowners both fair market value for their homes, relocation assistance up to $22,000.



050812_01

aug. 12, 2005

Mr. Michael MacMullen,
Airports Environmental Program Mgr.
FAA Chicago Airports District Office
2300 East Devon Ave.
Des Plaines, IL 60018

AUG 15 2005

Dear Mr. MacMullen:

Thank you for the invitation of July 20, 2005 to respond to the Notice of Availability for the O'Hare Modernization Final Environmental Impact Statement. I received this invitation on July 30th and the note stated you had to receive our reply by July 29th to be published in the Federal Register. Why the delay in mailing them out? 1

First of all, the modernization Program of O'Hare will NOT alleviate existing and future capacity and delay problems — only the weather can do that — and I don't think you can control that. Just last week we had no flight delays — because of the good weather. 2

The eight runway configuration is an accident waiting to happen — even the air controllers have tried to advise the FAA about this to no avail. 3

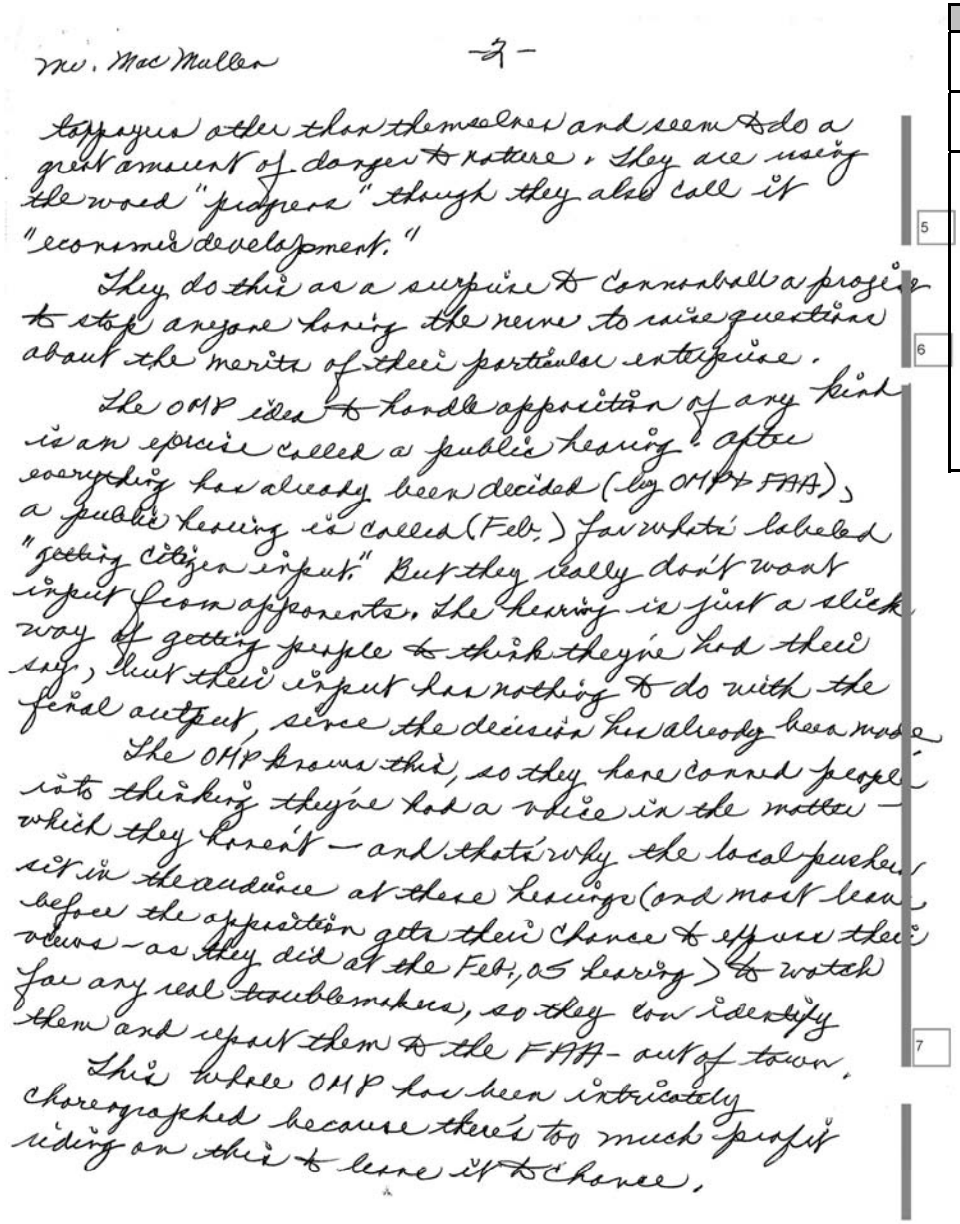
It is unconscionable to even think about disturbing an historic cemetery for a runway that is not needed. 4

In your July 20, 2005 letter, you state "The FAA will accept comments on updated and refined information in . . . sections of the FEIS and the associated appendices."

Re: The Wetlands

The ribbon cuttings always have something to do with the destruction of nature. The Army is especially fond of projects being paid for by

Comment	Response
1	The commenter misinterpreted the FAA's letter. In point of fact, the letter states that the Notice of Availability of the Final Environmental Impact Statement (Final EIS) in the Federal Register would be published July 29, 2005 and further stated that comments were due by September 6, 2005. The FAA notes that the commenter's previous comments on the Draft EIS and FAA's respective responses can be found in Sections U.7 and U.10 beginning on pages U.7-19 and U.10-149 of the Final EIS.
2	The FAA respectfully disagrees regarding the effect of the project on delays at O'Hare. While delays are often weather-related, poor weather is not the sole contributor to delays at O'Hare. Other factors that contribute to delays include activity levels, airline scheduling patterns, aircraft fleet mix, and airfield configuration. The FAA responded to this same comment in the Final EIS, please see response C-2 on page U.5-15 of Appendix U of the Final EIS.
3	The FAA responded to this same comment in the Final EIS, please see responses K-1 and K-2 beginning on page U.5-42 of Appendix U of the Final EIS.
4	The FAA notes the commenter's opinion regarding the relocation of a cemetery at O'Hare. The FAA addresses issues regarding cemeteries in Section 11 of the Record of Decision.



Mr. MacMullen -2-

taxpayers other than themselves and seem to do a great amount of damage to nature. They are using the word "progress" though they also call it "economic development."

They do this as a surprise to camouflage a project to stop anyone having the means to raise questions about the merits of their particular enterprise.

The OHP idea to handle opposition of any kind is an episode called a public hearing. After everything has already been decided (by OHP & FAA), a public hearing is called (Feb.) for what is labeled "getting citizen input." But they really don't want input from opponents. The hearing is just a slick way of getting people to think they've had their say, but their input has nothing to do with the final output, since the decision has already been made.

The OHP knows this, so they have conned people into thinking they've had a voice in the matter — which they haven't — and that's why the local pukes sit in the audience at these hearings (and most leave before the opposition gets their chance to express their views — as they did at the Feb. 05 hearing) to watch for any real troublemakers, so they can identify them and report them to the FAA - out of town.

This whole OHP has been intricately choreographed because there's too much profit riding on this to leave it to chance.

Comment	Response
5	Comment noted.
6	Comment noted.
7	The commenter's opinion is noted. The FAA respectfully disagrees and considers public input as a vital component of how the Agency conducts its NEPA process and reaches decisions. The FAA notes that only after providing an extensive public involvement process and thereafter giving careful consideration to all comments received on the Draft Environmental Impact Statement (EIS) and Final EIS did the Agency reach its decision in this Record of Decision. For further information on the FAA's public involvement process see topical responses A-1 and A-3 on pages U.5-2 and U.5-4 of Appendix U, respectively. In addition, see Section 8 of the Record of Decision.

Mr. Mac Mullen -3-

However, the FAA should take a hard look at Daley and his cohorts and all their nefarious schemes. He has more scandal (and more forthcoming) tied to his administration than any other mayor and I shudder to think what he and his cohorts would do with their fingers in the cash register of the O'Hare expansion.

I would not let the fox guard the chicken house. One of the best examples is the selection of Parsons Brinckerhoff Construction Serv. to manage the first stages of runway expansion after their Enron fiasco. 8

I ask that you at least be courteous enough to listen to the controllers who are responsible for getting aircraft safely off and on the ground. The FAA has continually ignored their expertise. 9

I sincerely hope this letter is not in vain and that the deed has already been done.

Sincerely,
Ellen L. Doering
793 Brantwood Ave.
Elk Grove Vlge, IL 60007

Comment	Response
8	The commenter's opinion is noted.
9	The FAA respectfully disagrees with the comment that air traffic controller's concerns have been ignored. As noted in response to comment 3, the FAA responded to this comment in the Final EIS, please see responses K-1 and K-2 beginning on page U.5-42 of Appendix U of the Final EIS.

050812_02

"John Schalliol"
<johns@sbnair.com
>
To
9-AGL-600-OMPEIS/AGL/FAA@FAA
08/12/2005 04:36 PM
cc
Subject
Comments, OMD EIS
Please respond to
<johns@sbnair.com
>

Dear Mr. MacMullen,

On behalf of the St. Joseph County Airport Authority, South Bend, IN, I want to state our strong support for the modernization program and for all aspects of the plan and of the FEIS. If you have any questions, or need any further information, please do not hesitate to contact me at 574-233-2185 x224. 1

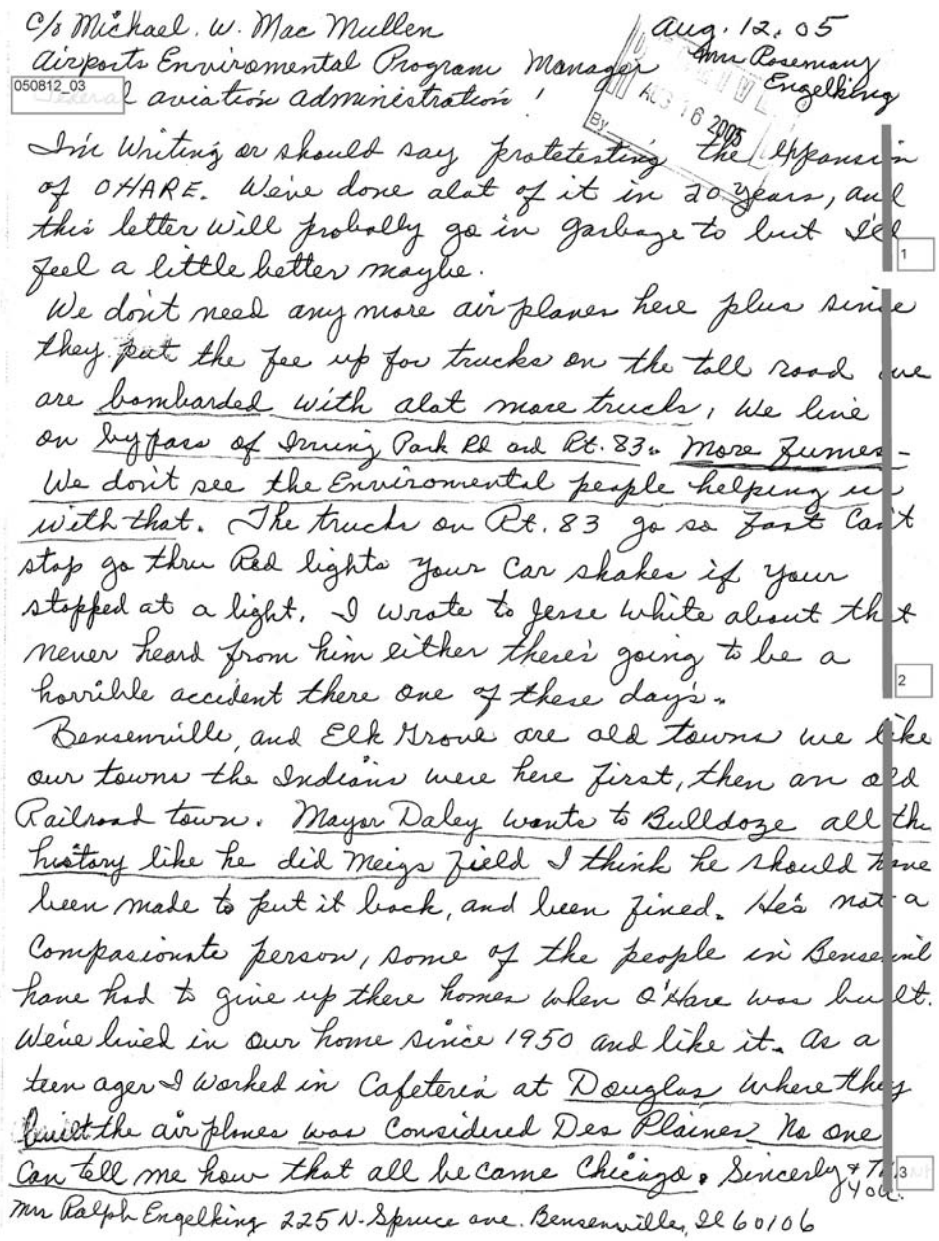
Sincerely yours,

John C. Schalliol, AAE
Executive Director
South Bend Regional Airport
4477 Progress Drive
South Bend, IN 46628

I choose Polesoft Lockspam to fight spam, and you?
http://www.polesoft.com/refer.html

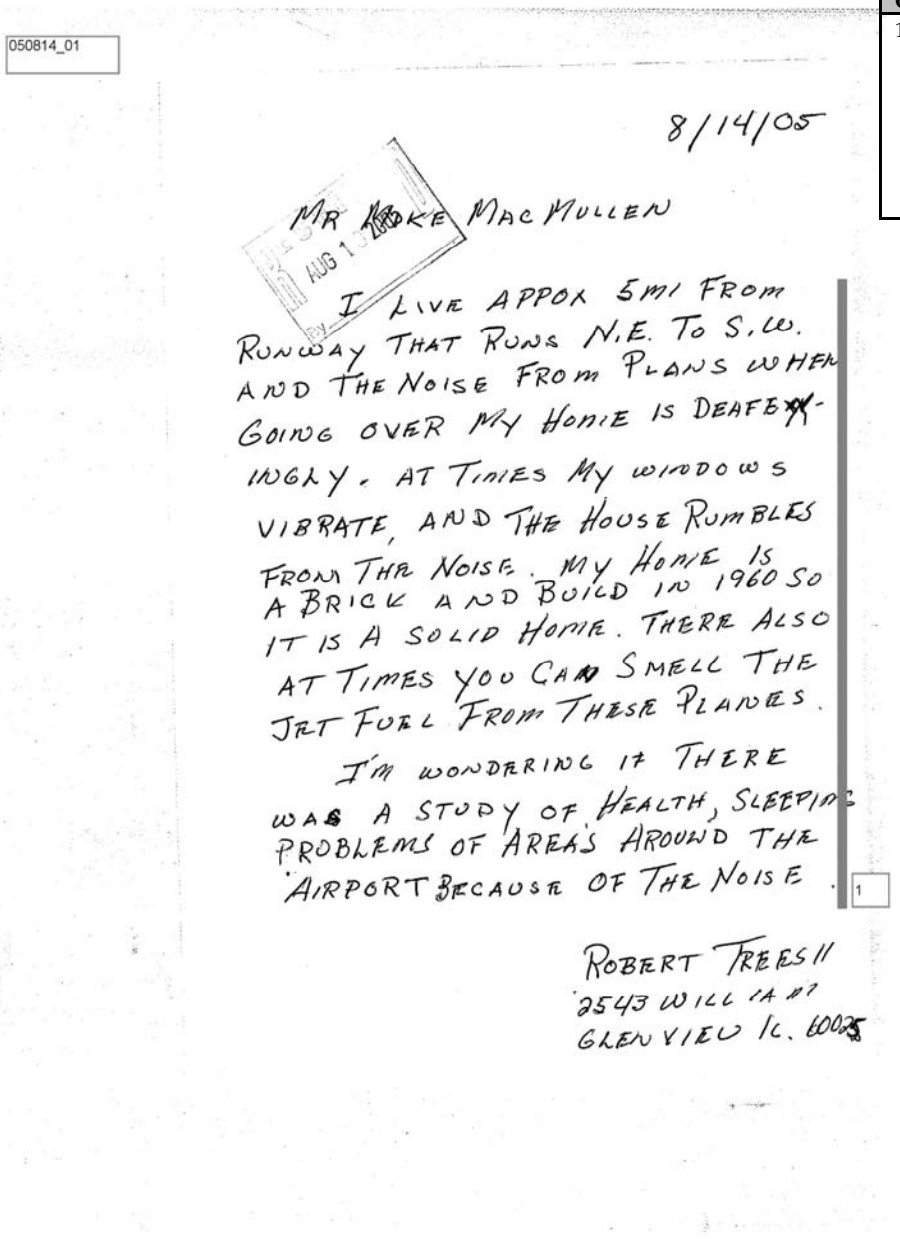
1

Comment	Response
1	The FAA notes the commenter's support for the project.



c/o Michael. W. Mac Mullen
Airports Environmental Program Manager
Federal aviation administration
Aug. 12. 05
Mrs Rosemary Engelking
050812_03
AUG 16 2005
BY
Sir Writing or should say protetesting the Expansion of OHARE. Weive done alot of it in 20 years, and this letter will probally go in garbage to but I'll feel a little better maybe. 1
We dont need any more air planes here plus since they put the fee up for trucks on the toll road we are bombarded with alot more trucks, We live on bypass of Irving Park Rd and Rt. 83. More fumes - We dont see the Environmental people helping us with that. The trucks on Rt. 83 go so fast Can't stop go thru Red lights your Car shakes if your stopped at a light. I wrote to Jesse White about that never heard from him either there's going to be a horrible accident there one of these days. 2
Bensenville, and Elk Grove are old towns we like our towns the Indians were here first, then an old Railroad town. Mayor Daley wants to Bulldoze all the history like he did Meigs field I think he should have been made to put it back, and been fined. He's not a Compassionate person, some of the people in Bensenville home had to give up there homes when O'Hare was built. Weive lived in our home since 1950 and like it. As a teen ager I worked in Cafeteria at Douglas where they built the airplanes was Considered Des Plaines/ No one Can tell me how that all became Chicago. Sincerely Mrs Ralph Engelking 225 N. Spruce ave. Bensenville, Il 60106 3

Comment	Response
1	FAA appreciates all the public comments and encourages public participation in the Environmental Impact Statement (EIS) process. The FAA takes seriously its responsibility to consider all comments on the EIS. This responsibility includes careful consideration of the comments, whether submitted as recorded testimony, letters, postcards, voice messages, emails, and faxes. The comments are considered equally without regard to the format. The commenter's opposition to the project is noted. For further information on the FAA's public involvement process see topical responses A-1 and A-3 on pages U.5-2 and U.5-4 of Appendix U of the Final EIS, respectively. In addition, see Section 8 of the Record of Decision.
2	The FAA notes the commenter's concern regarding air pollution. The potential air quality impacts were assessed as part of the EIS. The assessment of potential air quality impacts of the proposed project can be found in Section 5.6 of the EIS. The FAA conducted a detailed surface transportation analysis for the area surrounding O'Hare, which included an analysis of existing and future traffic near the Irving Park Road/Route 83 intersection. This analysis took into consideration any planned roadway improvement in the surrounding area for each future year of analysis. It was determined that surface traffic congestion is already present in the area, and would worsen from current conditions, whether or not O'Hare is expanded. However, in the cases where intersections and/or roadway segments were determined to be significantly impacted, the City of Chicago has committed to participate in cooperative planning with the entities having jurisdictional responsibilities for the impacted facilities to evaluate potential mitigation measures. The FAA as a condition of approval of this Record of Decision (ROD) is requiring Chicago to contribute a prorated share of the project-related mitigation costs, including for any environmental studies, if required (see Section 9.3 of the ROD). Additionally, the air quality analysis completed for the EIS accounted for existing and future motor vehicle emissions. Based on the results of the analysis, it was determined that the proposed projects would not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS). More information with regard to air quality is provided in Section 9.4 of the ROD.
3	The closure of Meigs Field is beyond the scope of this EIS. However, the FAA did take legal action against the City of Chicago over the 2003 closure of Meigs Field. The FAA is citing as part of its basis for action the agency's regulatory responsibility to preserve the national airspace system and ensure the traveling public with reasonable access to airports as the basis for its action. On August 31, 2005, the FAA issued a final notice of proposed civil penalty for $33,000. An FAA investigation into possible violations by the City of its federal grant assurances and its airport sponsor obligations is currently underway.



050814_01

8/14/05

MR [redacted] MAC MULLEN

I LIVE APPOX 5MI FROM RUNWAY THAT RUNS N.E. TO S.W. AND THE NOISE FROM PLANS WHEN GOING OVER MY HOME IS DEAFEX-INGLY. AT TIMES MY WINDOWS VIBRATE, AND THE HOUSE RUMBLES FROM THE NOISE. MY HOME IS A BRICK AND BUILD IN 1960 SO IT IS A SOLID HOME. THERE ALSO AT TIMES YOU CAN SMELL THE JET FUEL FROM THESE PLANES.

I'M WONDERING IF THERE WAS A STUDY OF HEALTH, SLEEPING PROBLEMS OF AREAS AROUND THE AIRPORT BECAUSE OF THE NOISE. 1

ROBERT TREES II
2543 WILLIAM
GLENVIEW IL. 60025

Comment	Response
1	The FAA notes the commenter's concern regarding air pollution and noise impact. Both the potential noise and air quality impacts were assessed as part of the Environmental Impact Statement (EIS). The assessment of noise can be found in Section 5.1 of the Final EIS; the assessment of potential air quality impacts of the proposed project can be found in Section 5.6 of the Final EIS.

050815_01

To :-- FAA Administrator Pres., George W. Bush **August 15, 2005**
Senator, Peter Fitzgerald Rep. Henry Hyde
Bensenville Pres., John Geils Elk Grove Pres., Craig Johnson

THE FAA TELLS US O'HARE NEEDS MORE RUNWAYS SO MORE PLANES CAN TAKEOFF IN A GIVEN HOUR. WHAT DO ALL THE AIRPORTS THAT ARE SCHEDULED TO RECEIVE THESE ADDED INCOMING FLIGHTS FROM O'HARE DO FOR RUNWAY AVAILABILITY TO ACCEPT MORE INCOMING FLIGHTS FROM O'HARE. IT SEEMS THAT THE O'HARE EXPANSION PLAN COST WILL NOW HAVE TO INCLUDE RUNWAY CONSTRUCTION FOR EACH OF THOSE AIRPORTS. WE CAN DELAY TAKEOFFS AT O'HARE LIKE WE HAVE BEEN DOING OR LET THOSE PLANES FLY AROUND AND KEEP BURNING FUEL UNTIL THE DESIGNATED AIRPORT FOR ONE OR MORE OF THESE PLANES TO LAND FEELS SAFE TO HAVE THEM LAND.

HAS ANYONE LOOKED INTO HOW MANY PLANES WHERE KEPT FROM TAKING-OFF PRIOR TO JULY 2005, BECAUSE A DESIGNATED FIRST STOP FOR THOSE PLANES WAS AN AIRPORT THAT COULD NOT ACCEPT AN INCOMING FLIGHT FOR UP TO AN HOUR OR MORE AFTER IT WAS SCHEDULED TO TAKE OFF FROM O'HARE. 1

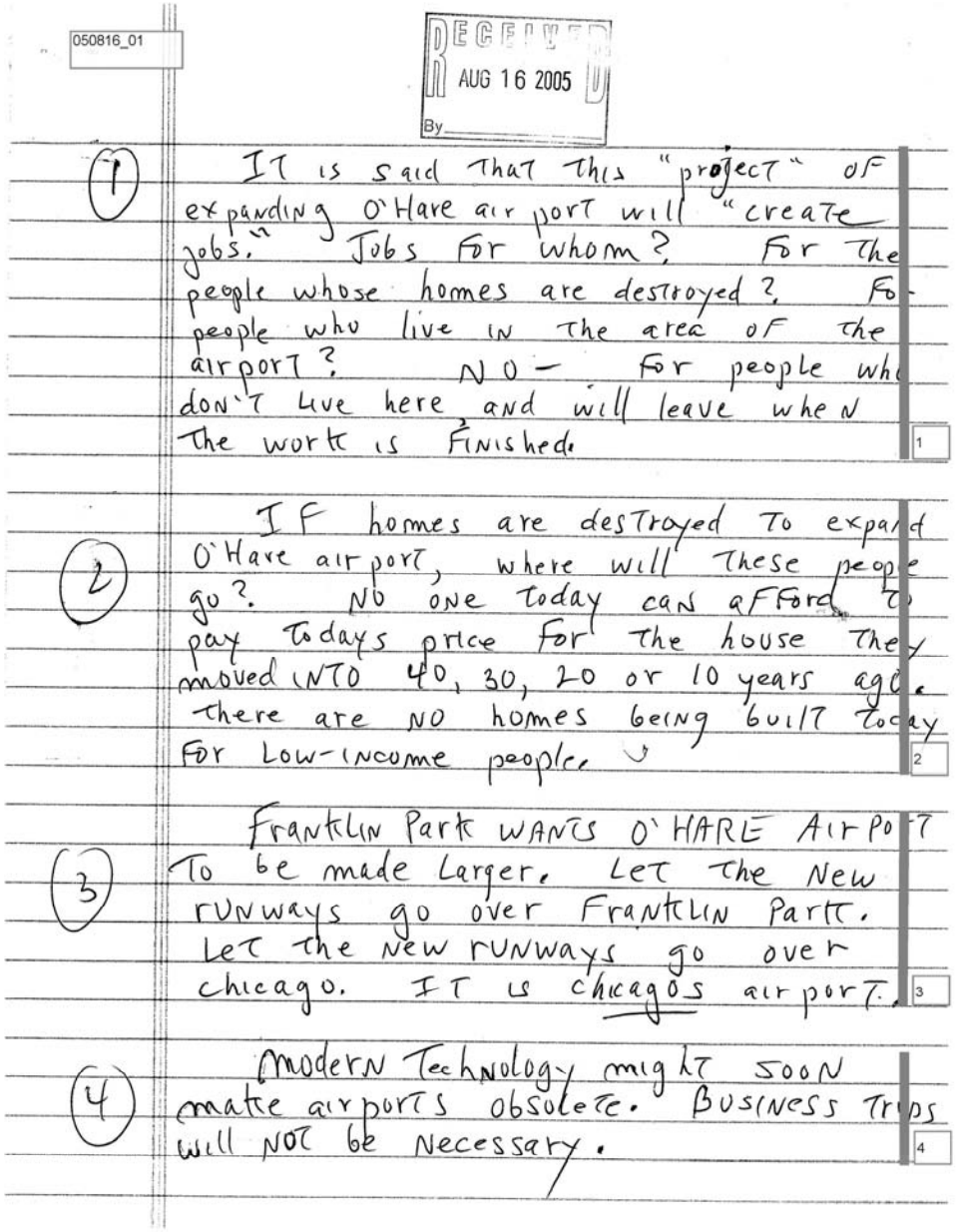
I THINK THESE FAA PEOPLE WILL HAVE TO CONSIDER THE COST FOR THE RUNWAY CONSTRUCTION OF ALL AIRPORTS TO PREVENT HAVING THE SAME DELAYS IN SCHEDULED TAKE OFF AT O'HARE 2

WHAT IS GOING TO HAPPEN IF WE HAVE MORE PLANES TAKE-OF IN AN HOUR. ONE THING FOR SURE PUTTING MORE MOVEMENT IN THE SAME GIVEN TIME FRAME INCREASES THE CHANCE OF AN ACCIDENT. 3

Thank You Very Much

Mario A. Valente
410 East Green Street
Bensenville Illinois 60106
630 - 766 - 0525

Comment	Response
1	Independent of this project, other airports may have the need for capacity improvements. However this would not be as a result of improvements to O'Hare as the commenter suggests. In many cases, airports owners and sponsors have either begun planning capacity improvement or begun to construct improvements. Improvements at O'Hare would not worsen congestion in the National Airspace System, rather it would lessen it. The proposed project removes airfield constraints at O'Hare by both reconfiguring and adding new runways thereby providing additional arrival capacity. With this additional arrival capacity, the proposed project helps reduce the need for air traffic controllers to slow air traffic en route to O'Hare thus reducing en route airspace congestion. The proposed project is not expected to result in the need for additional capacity at other airports.
2	Runway construction at other airports and its associated cost is independent of this project and therefore outside the scope of the Environmental Impact Statement (EIS).
3	The FAA addressed this comment in topical response K-2 beginning on page U.5-43 in Appendix U, Section U.5 of the Final EIS.


050816_01

RECEIVED
AUG 16 2005
By

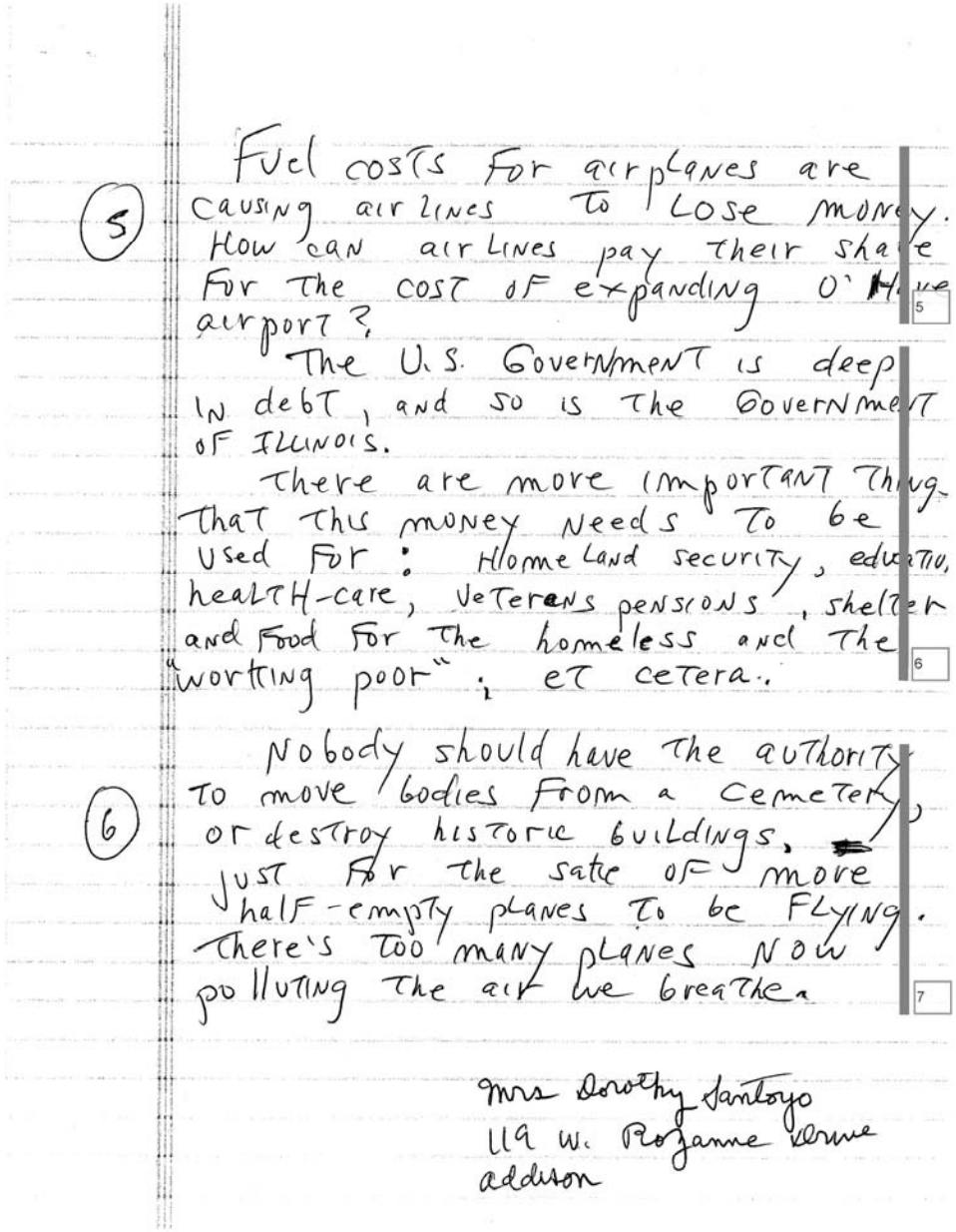
(1) It is said that this "project" of expanding O'Hare air port will "create jobs." Jobs for whom? For the people whose homes are destroyed? For people who live in the area of the airport? NO - for people who don't live here and will leave when the work is finished. 1

(2) IF homes are destroyed to expand O'Hare airport, where will these people go? NO one today can afford to pay todays price for the house they moved INTO 40, 30, 20 or 10 years ago. there are NO homes being built today for Low-income people. 2

(3) Franklin Park WANTS O'HARE Air Port To be made Larger. Let the New runways go over Franklin Park. Let the new runways go over chicago. IT is chicagos airport. 3

(4) Modern Technology might soon make airports obsolete. Business Trips will NOT be Necessary. 4

Comment	Response
1	The economic impact of potential O'Hare improvements was not a consideration in development of the purpose and need for this Environmental Impact Statement (EIS). However, Section 5.5 of the Final EIS identifies the potential socioeconomic impacts associated with the evaluated Alternatives. Additionally, the FAA did not utilize the City of Chicago job creation numbers (e.g. 195,000 jobs) cited by commenters in this analysis. For the purpose of evaluating indirect economic impacts on the Chicago region, the FAA utilized a series of economic studies that were prepared by Hamilton Rabinovitz & Alschuler, Inc. (CCT). These economic studies compared estimates of regional employment growth with Northeastern Illinois Planning Commission (NIPC) forecasts. The FAA reviewed the studies and concurred with the general findings. Each of the Build Alternatives would result in an increase in the economic activity associated with the Airport compared to the No Action alternative. The Build Alternatives under consideration (Alternatives C, D, and G) are estimated to result in an increase of 89,240 jobs, approximately 49,390 more than Alternative A. This does not include temporary jobs related to construction. For more information please refer to Section 5.5 of the Final EIS.
2	Any land acquisition by the City of Chicago related to O'Hare modernization requires full compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act). The Uniform Act is a Federal statute that regulates the acquisition and relocation process and protects the interests of residents and business owners affected by the potential acquisitions. Owners, tenants, and businesses in the proposed acquisition areas would be relocated pursuant to both the Uniform Act and *FAA's Advisory Circular AC150/5100-17, Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects*. The Uniform Act will be implemented by the City of Chicago's O'Hare Land Acquisition Program with compliance assured by FAA. These procedures are designed to ensure that relocated people and businesses will be treated fairly. If necessary, the Uniform Act requires provision of funds in excess of the fair market value of the acquisition property if and as necessary to acquire decent, safe, sanitary, and comparable replacement housing (including housing of last resort). In addition, the FAA is aware of the resident's concerns that the sale price established for their existing property (fair market value) may be insufficient to provide for purchase of comparable property in a new location. Provisions within the Uniform Act provide a mechanism to address these concern.
3	Comment noted.
4	The FAA evaluated the use of other modes of travel or communication, including telecommunications, as an alternative to O'Hare development. However, this alternative did not meet the purpose and need. For further information, please see Section 3.2.2.2 of the Final EIS.



(5) Fuel costs for airplanes are causing air lines to lose money. How can air lines pay their share for the cost of expanding O'Hare airport? 5

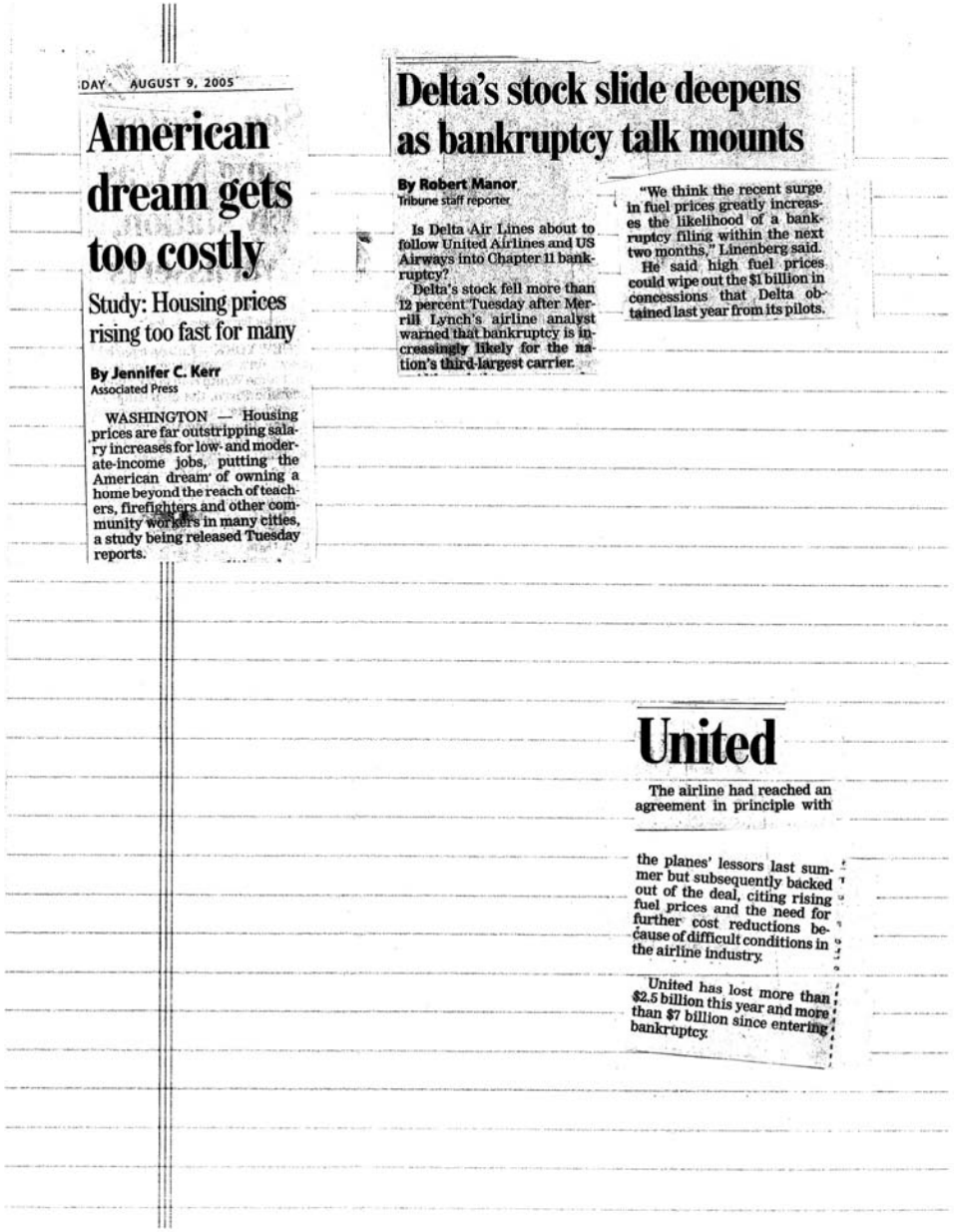
The U.S. Government is deep in debt, and so is the Government of Illinois.

There are more important things that this money needs to be used for: Homeland security, education, health-care, veterans pensions, shelter and food for the homeless and the "working poor"; et cetera. 6

(6) Nobody should have the authority to move bodies from a cemetery, or destroy historic buildings, just for the sake of more half-empty planes to be flying. There's too many planes now polluting the air we breathe. 7

Mrs Dorothy Santoyo
119 W. Rozanne Avenue
Addison

Comment	Response
5	In response to comments on the Draft Environmental Impact Statement (EIS), FAA has reviewed additional cost-related information applicable to the project. For purposes of this review under the National Environmental Policy Act (NEPA), the FAA has concluded that the estimated costs of the project are reasonable. FAA has also concluded that it is reasonable to assume that, based upon the impact O'Hare has on the Chicago region, as well as the National Airspace System (NAS), and the benefits to the regional economy, there will be sufficient funds to complete the proposal. In addition, FAA believes that with a project of this magnitude and importance, the availability of projected funding sources is sufficiently reasonable and capable of being obtained. Accordingly, the FAA has decided it is both appropriate and necessary under NEPA to subject the Sponsor's full build proposal and alternatives thereto to this environmental analysis because the entirety of the proposed action is reasonably foreseeable. This determination is made without prejudice to evaluation of the City's pending Letter of Intent request, which is a separate process from this environmental analysis. For more detail in regard to FAA's careful consideration of this issue, please see Chapter 1, Section 1.7 of the Final EIS.
6	The commenter's position related to US government debt, State of Illinois debt and prioritization of government spending is noted. For more detail in regard to FAA's careful consideration of this issue, please see Chapter 1, Section 1.7 of the Final EIS.
7	The commenter's opinion is noted. The FAA notes that impacts to the cemeteries, air quality, and historic buildings are of concern to the Agency. These impacts were evaluated in detail in the Environmental Impact Statement (EIS). For further information regarding FAA's careful consideration of these issues see: Sections 5.6 and 5.9 of the Final EIS. For further information regarding St. Johannes and Rest Haven Cemeteries see Section 11 of this Record of Decision.



DAY · AUGUST 9, 2005

American dream gets too costly

Study: Housing prices rising too fast for many

By Jennifer C. Kerr
Associated Press

WASHINGTON — Housing prices are far outstripping salary increases for low- and moderate-income jobs, putting the American dream of owning a home beyond the reach of teachers, firefighters and other community workers in many cities, a study being released Tuesday reports.

Delta's stock slide deepens as bankruptcy talk mounts

By Robert Manor
Tribune staff reporter

Is Delta Air Lines about to follow United Airlines and US Airways into Chapter 11 bankruptcy?

Delta's stock fell more than 12 percent Tuesday after Merrill Lynch's airline analyst warned that bankruptcy is increasingly likely for the nation's third-largest carrier.

"We think the recent surge in fuel prices greatly increases the likelihood of a bankruptcy filing within the next two months," Linenberg said.

He said high fuel prices could wipe out the $1 billion in concessions that Delta obtained last year from its pilots.

United

The airline had reached an agreement in principle with

the planes' lessors last summer but subsequently backed out of the deal, citing rising fuel prices and the need for further cost reductions because of difficult conditions in the airline industry.

United has lost more than $2.5 billion this year and more than $7 billion since entering bankruptcy.

Comment	Response
1	The commenter's support for the project is noted.

050816_02

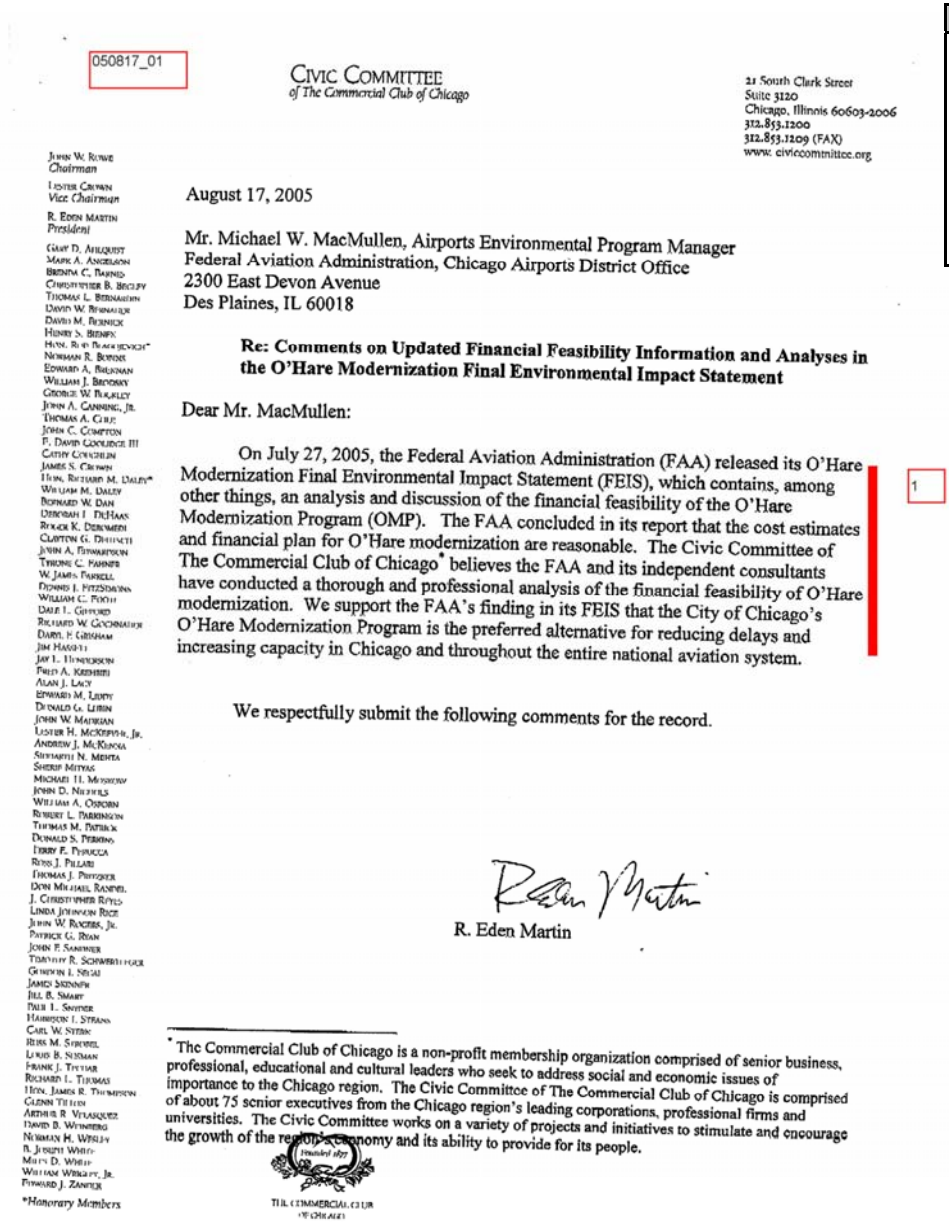
Dear Mr. MacMullen: ENOUGH POSTURING ALREADY,
I support the O'Hare Modernization Program because...
O'HARE is so important to the NATION'S SYSTEM - AND the fix is so common SENSICAL that why hasn't it already been done.?

NAME: DOUGLAS BERMUDEZ

ADDRESS: 5008 W. STRONG #3
CHICAGO, IL. 60630

EMAIL: ~~N~~ N/A PLEASE ALLOW THE FIX TO GO THROUGH. THANKS

1



050817_01

CIVIC COMMITTEE
of The Commercial Club of Chicago

21 South Clark Street
Suite 3120
Chicago, Illinois 60603-2006
312.853.1200
312.853.1209 (FAX)
www.civiccommittee.org

August 17, 2005

Mr. Michael W. MacMullen, Airports Environmental Program Manager
Federal Aviation Administration, Chicago Airports District Office
2300 East Devon Avenue
Des Plaines, IL 60018

Re: Comments on Updated Financial Feasibility Information and Analyses in the O'Hare Modernization Final Environmental Impact Statement

Dear Mr. MacMullen:

On July 27, 2005, the Federal Aviation Administration (FAA) released its O'Hare Modernization Final Environmental Impact Statement (FEIS), which contains, among other things, an analysis and discussion of the financial feasibility of the O'Hare Modernization Program (OMP). The FAA concluded in its report that the cost estimates and financial plan for O'Hare modernization are reasonable. The Civic Committee of The Commercial Club of Chicago* believes the FAA and its independent consultants have conducted a thorough and professional analysis of the financial feasibility of O'Hare modernization. We support the FAA's finding in its FEIS that the City of Chicago's O'Hare Modernization Program is the preferred alternative for reducing delays and increasing capacity in Chicago and throughout the entire national aviation system.

1

We respectfully submit the following comments for the record.

R. Eden Martin

* The Commercial Club of Chicago is a non-profit membership organization comprised of senior business, professional, educational and cultural leaders who seek to address social and economic issues of importance to the Chicago region. The Civic Committee of The Commercial Club of Chicago is comprised of about 75 senior executives from the Chicago region's leading corporations, professional firms and universities. The Civic Committee works on a variety of projects and initiatives to stimulate and encourage the growth of the region's economy and its ability to provide for its people.

THE COMMERCIAL CLUB OF CHICAGO

*Honorary Members

Comment	Response
1	The FAA acknowledges the Civic Committee of the Commercial Club of Chicago's (Civic Committee) comments regarding the financial feasibility information presented within the Final Environmental Impact Statement (EIS) as well as their overall support for O'Hare modernization. The FAA also notes the Civic Committee's statement that, "the FAA and its independent consultants have conducted a thorough and professional analysis of the financial feasibility of O'Hare modernization."

I.

On January 13, 2005, the FAA released its Draft Environmental Impact Statement (DEIS) for O'Hare Modernization. In its DEIS, the FAA discussed the cost estimates and financing plan that the City of Chicago submitted as part of its overall O'Hare International Airport Master Plan, which includes the modernization program. During the ensuing public comment phase, the FAA was criticized by the opponents of O'Hare expansion, the Suburban O'Hare Commission (SOC), which represents a few communities adjacent to the airport, and their hired consultants.

On April 6, 2005, SOC submitted a "critical assessment" of the O'Hare plan. The critique was prepared by the Campbell-Hill group in Alexandria, VA. The critique asserted that the costs of the modernization plan far exceed what the City of Chicago and the FAA have estimated, and that neither Chicago nor the airlines at O'Hare can finance the project. In particular, SOC and Campbell-Hill argued that "the FAA did not evaluate the details of the City's vague and generalized costs and simply inflated the City's Master Plan costs from 1999/2001 dollars to 2004 dollars." (at 12.) The critique also argued that "the DEIS failed to analyze the availability of funds for the OMP, even for the FAA's highly understated costs." (at 56.)

On July 21, 2005, the U.S. Department of Transportation's Inspector General released his report examining the FAA's process for reviewing and approving Chicago's OMP. The Inspector General's examination was conducted in response to a request from Representative Henry J. Hyde and former Senator Peter G. Fitzgerald, and it focused on the FAA's (1) process for reviewing the financial viability of the OMP, and (2) actions to redesign the airspace to accommodate the OMP. Although the Inspector General's review was not an assessment of the FAA's Environmental Impact Statement, it helped inform the work of the FAA on its FEIS and the administrative process related to the City's Request for a Letter of Intent (LOI) for federal funding for the project.

The Inspector General's report recommended that the FAA focus greater attention on verifying that the OMP's costs, schedule, and sources of funding are realistic, reasonable, and credible. (at 3.) In particular, the report states that "the FAA, in its review of the LOI, must ensure that the statement of costs is credible and includes escalations for any anticipated schedule delays and rising labor or materials costs." (at 3 and 4.)

II.

The criticisms of SOC and the comments of the U.S. DOT Inspector General, and others, prompted the FAA to undertake a broader, more in-depth review of the financial feasibility of O'Hare modernization as part of its EIS. The FAA's enhanced financial review and its finding – that the cost estimates and financing plan put forth by the City of Chicago are reasonable – further support the agency's conclusion that O'Hare modernization is the preferred alternative for reducing delays and expanding capacity in the region and throughout the entire national aviation system.

2

In response to the public comments it received on its DEIS, the FAA "broadened the discussion in this Final EIS of the financial feasibility, which includes an analysis of the City's estimated costs for this proposal." (FEIS 1-52) In its response to the Inspector General's report, the FAA stated that it "agrees that the OMP deserves additional scrutiny and is applying that higher level of diligence to the OMP proposal and its associated LOI request." As part of this higher level of due diligence on the financial feasibility of O'Hare modernization, the FAA conducted several important inquiries.

First, the FAA adjusted its cost estimate escalation by using more detailed construction-related inflation factors. In the DEIS, the FAA used a uniform cost escalator of 2.4% to update Chicago's cost estimates. In the FEIS, the FAA used more specific escalation indicators – escalators which are appropriate for the specific types of construction work involved in the project, i.e. RS Means Square Foot Cost from 1999, 2001, and 2004 and Heavy Construction Cost Data from 1999, 2001 and 2004 for historical cost indexes for the City of Chicago. This analysis updated the cost estimate for OMP from $6.6 billion in 2001 dollars to $7.5 billion in 2004 dollars.

Second, the FAA contracted independent airport engineering and planning consulting firm, Crawford, Murphy & Tilly, Inc., to assess the reasonableness of Chicago's cost estimates in the Master Plan for O'Hare, which includes O'Hare modernization, the Capital Improvement Program, and the World Gateway Program. The FAA's consultants conducted the following analyses as part of their review:

- analyzed the completeness and comprehensiveness of the listed program components and project work items;
- analyzed individual projects for reasonableness of cost by order of magnitude cost estimate calculations, including a side by side review of nearly 50 key components of the proposed construction; and
- conducted a broad scale evaluation of the project costs for construction of the four new runways under the OMP and compared the costs to new runways at five other large airports, Boston Logan, George Bush (Houston), Sea-Tac (Seattle), Hartsfield (Atlanta), and St. Louis Lambert.

The FAA's consultants concluded: (1) "In general, the cost breakdowns provided by the City appear to be reasonable and somewhat conservative in consideration of the magnitude of scale and relatively high production rates potentially achievable with large work areas and volume." (2) the "costs for the runway components of the O'Hare OMP prepared by the City of Chicago appear to fall in the middle of the range of costs for large runway programs" and "the dollar estimates for OMP runways…would indicate that they are comparable to other programs" and (3) "Overall, the City of Chicago OMP estimated costs for the base year 2001 appear to be reasonable and representative of the probable cost of the OMP in that year. For the purposes of this review under NEPA, [Crawford, Murphy, Tilly] has concluded that the estimated costs considered within this sample analysis are reasonable." (at 5.)

Third, the FAA contracted an independent airport management consulting firm, Leigh Fisher Associates, to assess the feasibility of the City's financial plan for OMP and compare

3

certain feasibility metrics for O'Hare to other large hub airports. The FAA's consultants conducted the following analyses as part of their review:

- reviewed the sources of funding identified by the City;
- analyzed the reasonableness of required future airline user charges at O'Hare; and
- gauged the financial community's acceptance of the OMP financing plan.

Based on their analysis, the FAA's consultants concluded: (1) "the funding sources [identified by the City] are appropriate for this type of airport development program, and reasonably consistent with the sources of funds that are used for large hub airport capital programs at other U.S. airports." (at 3.) (2) "It is reasonable to expect that, over the time horizon of the OMP (that is, through 2018), the average cost per enplanement at O'Hare..., while relatively high by current standards, will be within the range that is experienced at large hub airports nationwide," (at 8.); (3) "bond rating agencies have chosen to assign investment-grade ratings to the bonds issued by the City of Chicago." These ratings, "are an indication that the financial community has accepted the City's financial plan as reasonable, in relation to the benefits of such investment." (at 9.) and (4) there is "no reason to believe that the resulting costs to airport users (most significantly, major airlines serving ORD) will significantly adversely affect the ability to finance the capital projects and realize the projected aviation demand, particularly in the context of future investments that will be required at other large hub airports in the United States." (at 10.)

III.

The FAA and its outside experts have exercised reasonable due diligence in analyzing the project costs and financial plan for O'Hare modernization. The Civic Committee, which is composed of the heads of major corporations and business firms in the Chicago region, has supported expansion of O'Hare for well over a decade – and it supports the present modernization plan. It does so – not because every cost detail and every element of future demand can be predicted with certainty – but because, in an uncertain world, business investments must often be made in circumstances where all important facts cannot be known, and the future is not perfectly foreseeable. Business leaders regularly face such situations in their own businesses. They know that to make no decision because of uncertainty is to make a decision – a decision to do nothing.

In the case of O'Hare modernization, we believe the FAA and its outside experts have now validated the financial feasibility of the project. The City, the airlines, and the FAA know enough to go forward, and we support that decision. We know it will cost a lot of money to expand the airport – billions of dollars. We know that the costs of expanding O'Hare – one way or the other – must be met, in the final instance, through government support and increases in charges to customers. We know that O'Hare is central to the future of the Chicago region, and is also critical to the nation's air transport system. We know from recent experience that people continue to fly, even in times of terrorist threat and uncertainty. They fly regardless of which corporate name or logo appears on the tail of the aircraft. We believe that they will continue to fly in the future.

The objections of SOC ignore the national need for an expanded O'Hare and the costs of failing to meet that need. Put to one side the plain fact that SOC's objections to O'Hare have

4

nothing to do with solicitude for Chicago's ability to provide for its people or its financial health. Also, put to one side the fact that their arguments are based on factual assertions which are contrary to the FAA's own findings, or which are inherently speculative. The larger problem is that O'Hare opponents totally disregard the national interest in expanding airport capacity in Chicago.

O'Hare's west suburban opponents analyze O'Hare expansion as if it were isolated from the rest of the national aviation system. They ignore the delays caused in New York and Washington, the disruptions caused to passengers in Atlanta, the delay costs incurred in Los Angeles and Houston – when O'Hare is shut down or delayed because of inadequate runway capacity. They also ignore the fact that ramping up Gary, or starting a new airport in the fields 45 miles south of the Chicago Loop, will not in the forseeable future significantly alleviate those delays or mitigate those costs.

The operational capacity of O'Hare Airport is of crucial importance to the nation's air transportation system – both civilian, and (potentially) military. O'Hare is important to the lives of families, business travelers, and public and private-sector employees all over the country.

If the west suburban opponents of O'Hare had been around at the time, they would have opposed the development of the inland waterway system in Illinois because the financing was uncertain. They would have opposed construction of the transcontinental railroads because the costs could not be predicted. They would have opposed building and expanding O'Hare after World War II because it was not clear that the costs would be borne by the passengers.

Chicago was built on transportation. Its present position in the economy and commerce is founded on its position at the cross-roads of the continent, and upon its transportation facilities. Its future depends on maintaining its central position as the principal mid-American aviation hub for both domestic and international travel.

The one thing which the FAA may be sure of is that if the modernization of O'Hare is approved, the financing will get done. The City of Chicago, the airlines, the FAA, the U.S. Department of Transportation, and Congress will work out the remaining details and make it happen.

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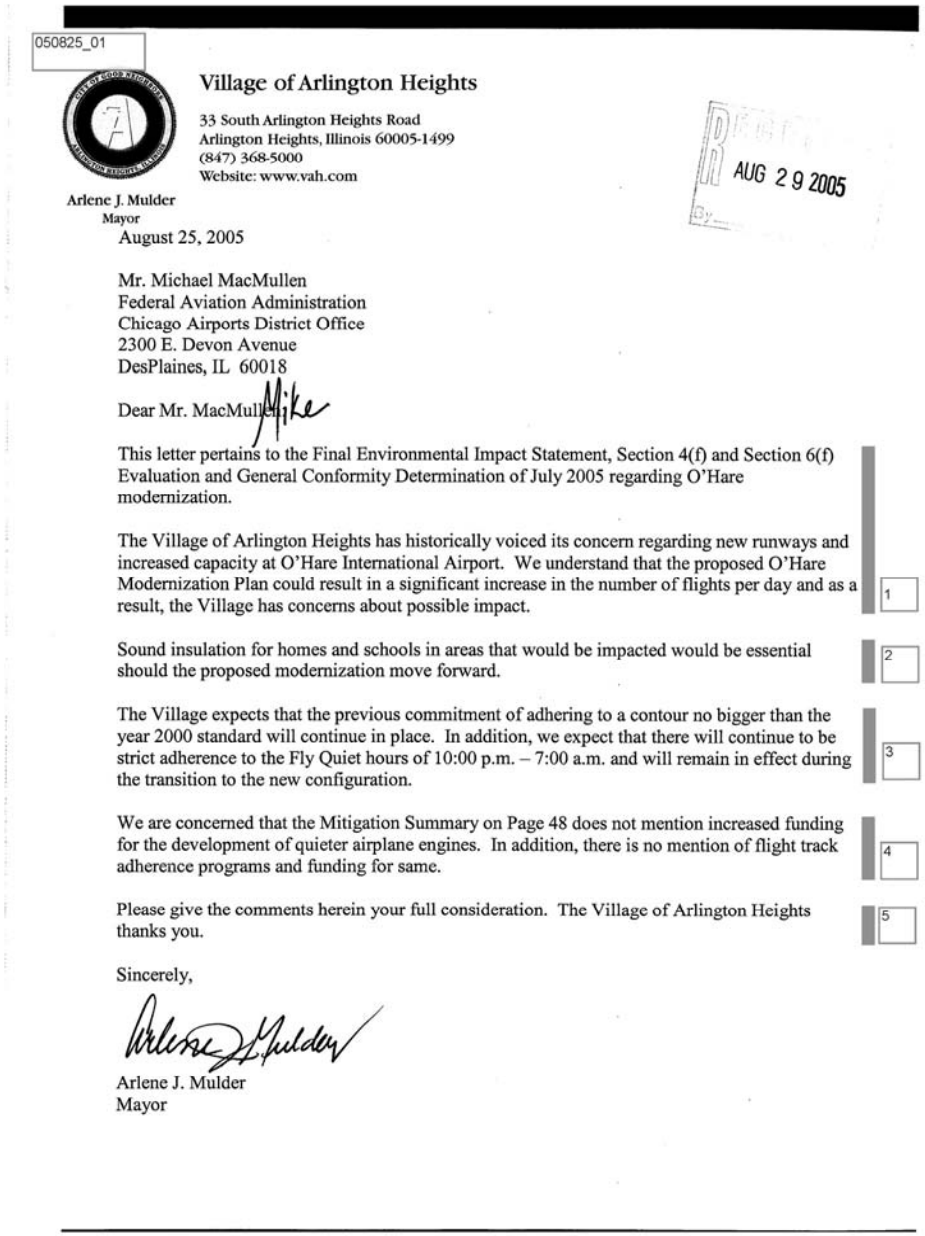
Comment	Response
1	See response to this comment on page A.2-54.



050825_01

Village of Arlington Heights

33 South Arlington Heights Road
Arlington Heights, Illinois 60005-1499
(847) 368-5000
Website: www.vah.com

Arlene J. Mulder
Mayor

RECEIVED
AUG 29 2005
By

August 25, 2005

Mr. Michael MacMullen
Federal Aviation Administration
Chicago Airports District Office
2300 E. Devon Avenue
DesPlaines, IL 60018

Dear Mr. MacMullen, Mike

This letter pertains to the Final Environmental Impact Statement, Section 4(f) and Section 6(f) Evaluation and General Conformity Determination of July 2005 regarding O'Hare modernization.

The Village of Arlington Heights has historically voiced its concern regarding new runways and increased capacity at O'Hare International Airport. We understand that the proposed O'Hare Modernization Plan could result in a significant increase in the number of flights per day and as a result, the Village has concerns about possible impact. 1

Sound insulation for homes and schools in areas that would be impacted would be essential should the proposed modernization move forward. 2

The Village expects that the previous commitment of adhering to a contour no bigger than the year 2000 standard will continue in place. In addition, we expect that there will continue to be strict adherence to the Fly Quiet hours of 10:00 p.m. – 7:00 a.m. and will remain in effect during the transition to the new configuration. 3

We are concerned that the Mitigation Summary on Page 48 does not mention increased funding for the development of quieter airplane engines. In addition, there is no mention of flight track adherence programs and funding for same. 4

Please give the comments herein your full consideration. The Village of Arlington Heights thanks you. 5

Sincerely,

Arlene J. Mulder
Mayor

Comment	Response
1	The Village's concern about possible impacts that would result from the increase in flights with the proposed O'Hare Modernization Program (OMP) is noted.
2	Mitigation for potential noise impacts is discussed in Section 9.1 of the Record of Decision (ROD).
3	The Village's comments regarding noise are noted. See Section 5.1 of the Final Environmental Impact Statement (Final EIS) for the noise contours and Section 9.1 of the ROD for the noise related mitigation commitments. The City of Chicago has committed to continue the existing Fly Quiet Program, which is in effect during nighttime hours (10:00 PM to 7:00 AM), throughout the duration of the OMP, except as affected by runway decommissioning. If modification to the Fly Quiet Program is needed in the future, it will be completed by the O'Hare Noise Compatibility Commission (ONCC), of which the Village of Arlington Heights is a member, in consultation with the FAA and the City of Chicago.
4	The Village's concern that the Final EIS did not mention increased funding for the development of quieter airplane engines is acknowledged. It should be noted that the International Civil Aviation Organization (ICAO) adopted a Stage 4 noise standard, which goes into effect in 2006, which requires newly manufactured aircraft to be at least 10 decibels quieter than Stage 3 aircraft. Additionally, the FAA will continue to support ONCC efforts to work further with the airlines in an effort to continually develop improved noise standards. The Village's concern that the Final EIS did not mention funding/development of flight track adherence programs is noted. The FAA supports the use of noise abatement technologies, such as Global Positioning System (GPS) technologies, to better adhere to noise abatement flight tracks. The FAA will continue to support airline's decisions to develop these measures, and work with the ONCC to oversee noise mitigation efforts around O'Hare.
5	The FAA appreciates the Village of Arlington Heights comments on the Final EIS, Section 4(f)/6(f) Evaluation, and the General Conformity Determination.

Monday, August 29, 2005 11:30:13 AM Page 1 of 1

050829_03

Jack Becque
930 Carswell Court
Elk Grove Village, Illinois 60007
847-956-0294

August 29, 2005

Mr. Michael W. MacMullen
Airports Environmental Program Manager
Federal Aviation Administration
Chicago Airports District Office
2300 East Devon Avenue
Des Plaines, Illinois 60018

Dear Mr. MacMullen:

In your letter dated July 27, 2005 you requested comments from me for various sections in the O'Hare Modernization Final Environmental Impact Statement (FEIS). I have reviewed those sections. My comments follow.

Noise Pollution
Presently, airplanes that turn west after they depart on runway 32L fly over my home. Some of these airplanes cause the house to vibrate. These affect my quality of life.

The new 9L/27R runway will be in line with my home. When runway 9L/27R becomes operational my home will be subjected to noise not only from airplanes departing on runway 27R but also from those landing on 9L. And, according to FEIS Exhibit E-19 my home will be subjected to noise at all times from airplanes landing on runway 9L and runway 9C or from those departing on runway 27L. 1

Air Pollution
I wonder how people who have never smoked and who have never been exposed to second hand smoke get lung cancer. Alas, they must be getting it from **AIR POLLUTION**. And now, according to the information presented in FEIS Exhibits 5.6-1 and 5.6-2 O'Hare will be tripling and doubling its contributions to air pollution. 2

Safety
FEIS Table 1-3 shows 223,299 additional operations from FY2005 to FY2020. More increases in air traffic will increase the danger of air mishaps over, and ground mishaps at O'Hare. When is the FAA going to stop putting 10 pounds into the 5 pound O'Hare bag? 3

St. Johannes Cemetery
Mr. MacMullen, go to St. Johannes Cemetery and walk through it. While you are there ask yourself this question, "How would I feel if my ancestors' graves were going to be **DESTROYED**?"

The O'Hare Modernization Plan benefits only ONE person.

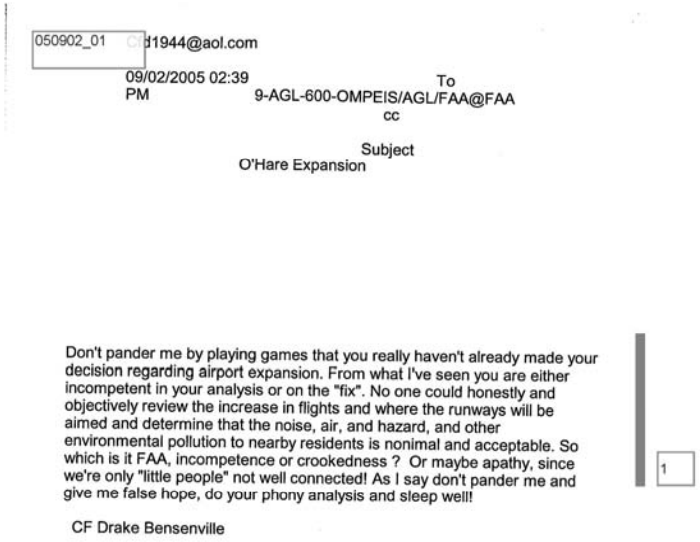
Mr. MacMullen, my neighbors and I do not want apprehension, poor health, and more disruptions to our quality of life. Please be considerate and logical. Do not issue the Record of Decision. 4

Sincerely,

Jack Becque

Jack Becque

Comment	Response
1	Comment noted. The commenter's home is located outside of the 65 (Day Night Sound Level) DNL contour currently and is projected to remain outside the 65 DNL contour in the build out +5 year. Please see Section 5.1 of the Final Environmental Impact Statement (Final EIS) for further information on the noise assessment, including presentation of the contours for each year of analysis. Also, see Section 9.1 of the Record of Decision. Finally, the FAA has presented the flight tracks in Appendix F, Attachment F-2 of the Final EIS.
2	The data illustrated in Exhibits 5.6-1 and 5.6-2 are representative of the Illinois Environmental Protection Agency's (IEPA) 1990 base year and 2007 projected year estimates of volatile organic compounds and nitrogen oxides emissions for aircraft and ground service equipment at all airports within the Chicago non-attainment area (Cook, DuPage, Grundy (Aux Sable and Gooselake Townships), Kane, Kendall (Oswego Township), Lake, McHenry, and Will counties). These airports include O'Hare International, Chicago Midway, Lansing Municipal, and Palwaukee Municipal in Cook County, the Schaumburg Regional and DuPage airports in DuPage County, and the Clow International, Joliet Regional, and Sanger airports in Will County. Notably, when the IEPA prepares their projected source estimates, they use rather conservative methods to do so. As shown in Table 5.6-8 (Emissions Inventory (2002)) and Table 5.6-20 (Emission Inventories – Build Out + 5), emissions of carbon monoxide, volatile organic compounds, and particulate matter resulting from O'Hare International-related activities are estimated to be less in 2018/2019 than existing levels with the improvements at the Airport while emissions of nitrogen oxides and sulfur oxides are estimated to increase (at the most approximately 2 and 0.4 tons per day). Additionally, as shown in Table I-61 (Summary of HAP Emissions – Delayed Schedule) future levels of HAPs (hazardous air pollutants) are predicted to be less with the improvements (at a minimum 36 percent less) than existing levels. HAPs are gaseous organic and inorganic chemicals and particulate matter that are either known or suspected to cause cancer (to be carcinogenic) or known or suspected to cause other serious health effects (non-carcinogenic). Finally, FAA notes that there will be no exceedances of the National Ambient Air Quality Standards for any of the pollutants evaluated.
3	The commenter is referred to topical responses K-1 and K-2 beginning on page U.5-42 of Appendix U of the Final EIS.
4	For information regarding St. Johannes and Rest Haven cemeteries see Section 11 of this Record of Decision.



050902_01 d1944@aol.com

09/02/2005 02:39 PM

To 9-AGL-600-OMPEIS/AGL/FAA@FAA

cc

Subject O'Hare Expansion

Don't pander me by playing games that you really haven't already made your decision regarding airport expansion. From what I've seen you are either incompetent in your analysis or on the "fix". No one could honestly and objectively review the increase in flights and where the runways will be aimed and determine that the noise, air, and hazard, and other environmental pollution to nearby residents is nonimal and acceptable. So which is it FAA, incompetence or crookedness ? Or maybe apathy, since we're only "little people" not well connected! As I say don't pander me and give me false hope, do your phony analysis and sleep well!

CF Drake Bensenville

1

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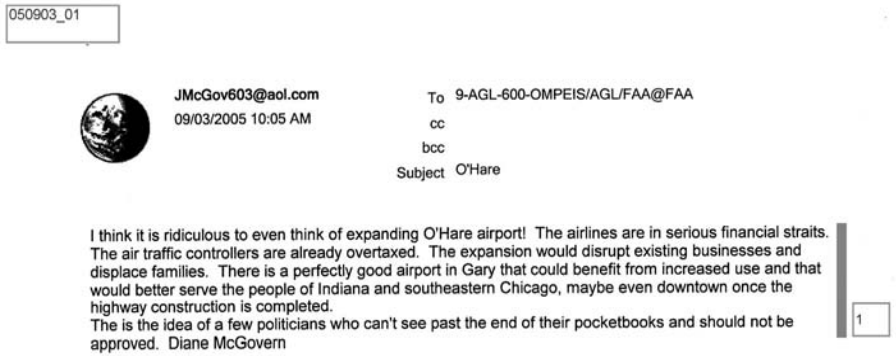
Comment	Response
1	The commenter's opinion is noted. FAA appreciates all the public comments and encourages public participation in the Environmental Impact Statement (EIS) process. The FAA takes seriously its responsibility to consider all comments on the Draft EIS. This responsibility includes careful consideration of the comments, whether submitted as recorded testimony, letters, postcards, voice messages, emails, and faxes. In response to commenters' expressed concerns that the FAA not "rubber stamp" the project, the FAA would never compromise the integrity of its review or decision-making process to "rubber stamp" any proposal. The FAA's careful and thorough decision-making process has been publicly documented and disseminated. Chapter 5 of the EIS discloses the potential environmental impacts resulting from the alternatives considered. Some of the sections that may be of particular interest to the commenters include: 1) Section 5.1, Noise, 2) Section 5.4, Social Impacts, and 3)Section 5.6, Air Quality.



050903_01

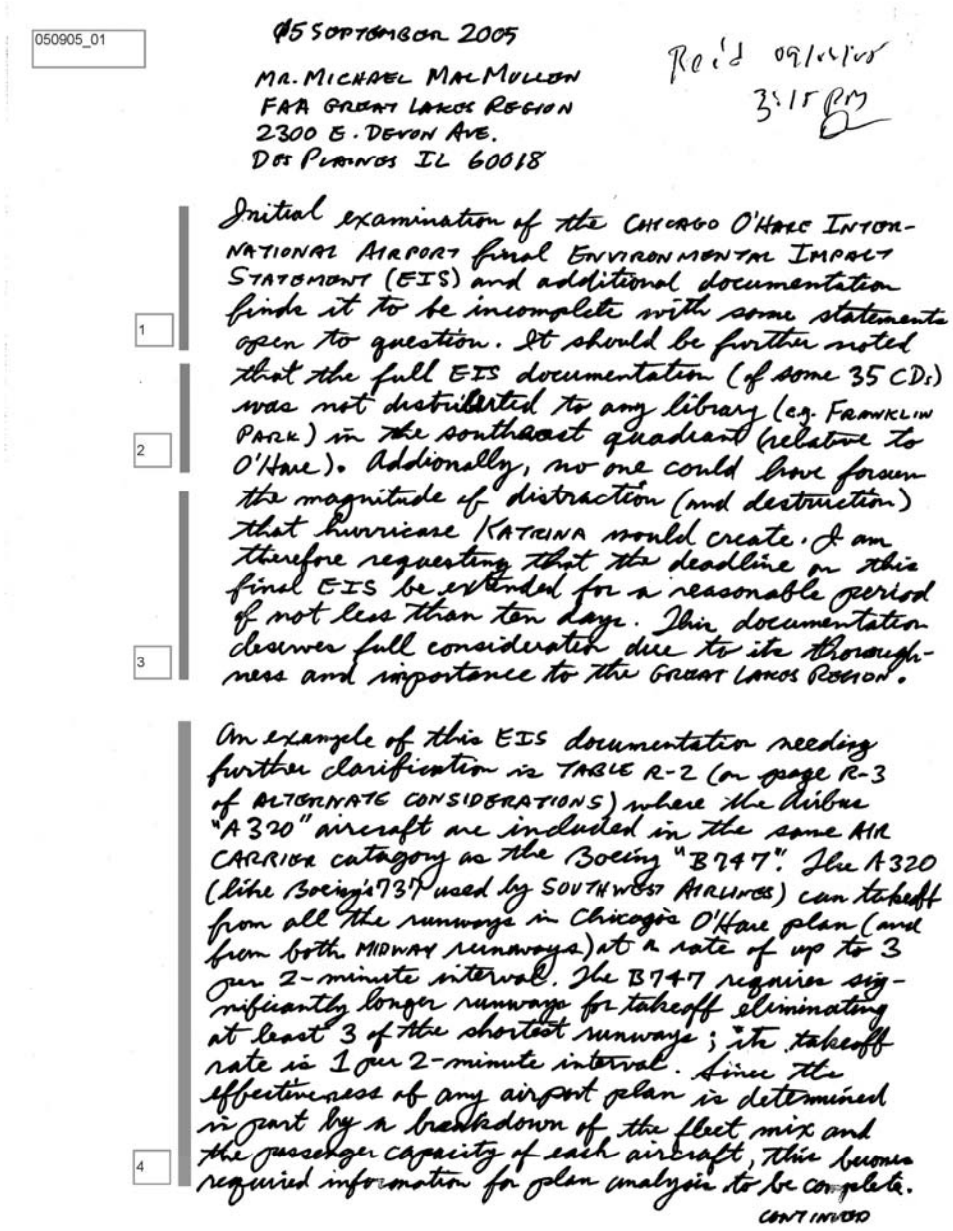
JMcGov603@aol.com
09/03/2005 10:05 AM

To 9-AGL-600-OMPEIS/AGL/FAA@FAA
cc
bcc
Subject O'Hare

I think it is ridiculous to even think of expanding O'Hare airport! The airlines are in serious financial straits. The air traffic controllers are already overtaxed. The expansion would disrupt existing businesses and displace families. There is a perfectly good airport in Gary that could benefit from increased use and that would better serve the people of Indiana and southeastern Chicago, maybe even downtown once the highway construction is completed.
The is the idea of a few politicians who can't see past the end of their pocketbooks and should not be approved. Diane McGovern

1

Comment	Response
1	The FAA notes the commenter's opposition to the project. In addition, the FAA did evaluate the project's financial feasibility as well as the effect of the loss of a hubbing carrier at O'Hare, see Section 1.7 and Appendix R of the Final Environmental Impact Statement (Final EIS). FAA also documented and disclosed the impacts due to land acquisition of both homes and businesses in Section 5.4. Finally, the FAA also evaluated the use of other airports, including Gary/Chicago International Airport, as an alternative to O'Hare improvements, however, this alternative did not meet the purposed and need, see Chapter 3. Regarding air traffic controller workload, the FAA would not operate any alternative in such a way that safety would be impaired. Safety has been a key consideration in the development of all the alternatives and in defining how they would be operated. FAA is actively reviewing potential staffing needs and will budget for them accordingly.



050905_01

05 SEPTEMBER 2005

MR. MICHAEL MACMULLEN
FAA GREAT LAKES REGION
2300 E. DEVON AVE.
DES PLAINES IL 60018

Rec'd 09/06/05
3:15 PM

1 Initial examination of the CHICAGO O'HARE INTERNATIONAL AIRPORT final ENVIRONMENTAL IMPACT STATEMENT (EIS) and additional documentation finds it to be incomplete with some statements open to question. It should be further noted

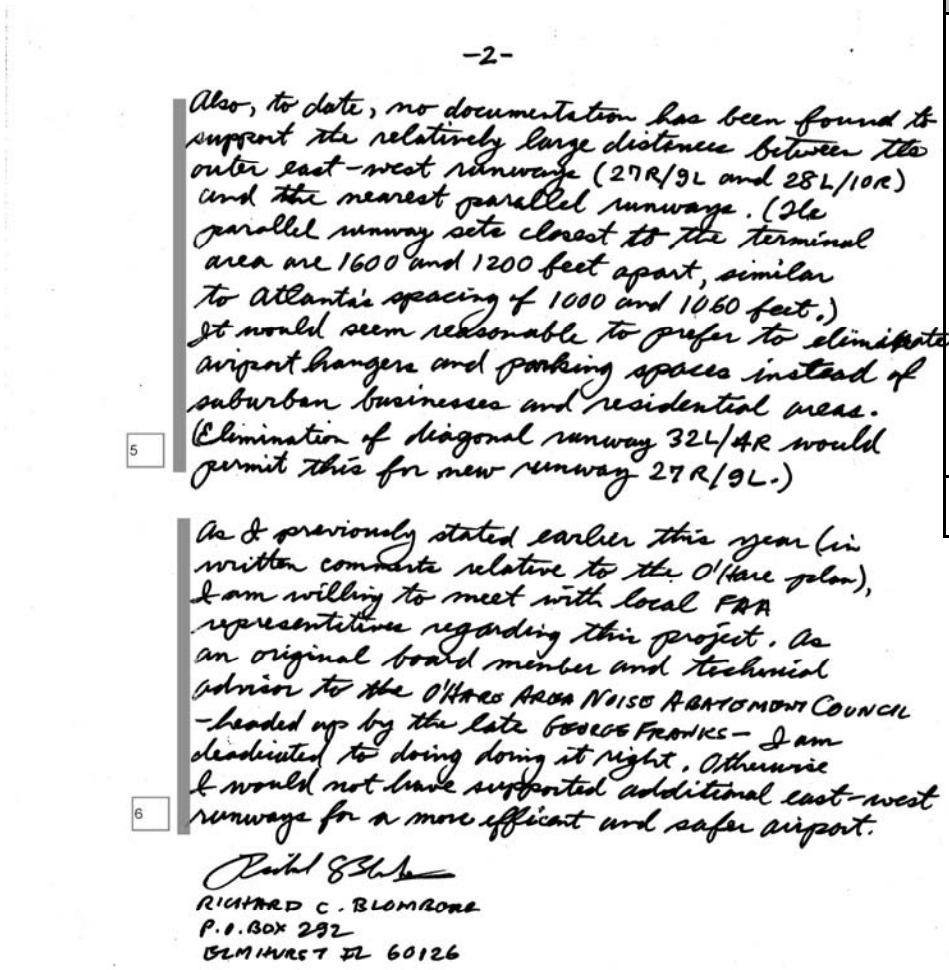
2 that the full EIS documentation (of some 35 CDs) was not distributed to any library (eg. FRANKLIN PARK) in the southeast quadrant (relative to O'Hare). Additionally, no one could have foreseen the magnitude of distraction (and destruction)

3 that hurricane KATRINA would create. I am therefore requesting that the deadline on this final EIS be extended for a reasonable period of not less than ten days. This documentation deserves full consideration due to its thoroughness and importance to the GREAT LAKES REGION.

4 An example of this EIS documentation needing further clarification is TABLE R-2 (on page R-3 of ALTERNATE CONSIDERATIONS) where the Airbus "A320" aircraft are included in the same AIR CARRIER catagory as the Boeing "B747". The A320 (like Boeing's 737 used by SOUTHWEST AIRLINES) can takeoff from all the runways in Chicago's O'Hare plan (and from both MIDWAY runways) at a rate of up to 3 per 2-minute interval. The B747 requires significantly longer runways for takeoff eliminating at least 3 of the shortest runways; its takeoff rate is 1 per 2-minute interval. Since the effectiveness of any airport plan is determined in part by a breakdown of the fleet mix and the passenger capacity of each aircraft, this becomes required information for plan analysis to be complete.

CONTINUED

Comment	Response
1	The FAA respectfully disagrees with the commenter's opinion of the completeness of the Environmental Impact Statement (EIS) analysis.
2	The FAA widely distributed the Draft and Final EIS to 33 local libraries, including Franklin Park and Elmhurst. In addition, the FAA posted both the Draft EIS, Final EIS and reference documentation to the world wide web site, http://www.agl.faa.gov/OMP/. Finally, the FAA notes that the "full documentation" referred to by the commenter was distributed to five local libraries including Bensenville's location.
3	The FAA sent a letter to Mr. Blomberg on September 15, 2005 stating, "we must respectfully deny your request for an Final EIS comment period extension."
4	The FAA recognizes the importance of fleet mix assumptions in the evaluation of an airport improvement such as the one contemplated within the EIS. In fact, the FAA presents the detailed fleet mix assumptions in Appendix B of the EIS. The FAA also acknowledges the differences between aircraft such as the Airbus A320 and Boeing 747 in terms of operational performance and airfield requirements. The simulation modeling, documented in Appendix D of the EIS, conducted for the environmental analysis carefully considers the dynamic fleet mix employed by the users at O'Hare and accounts for the associated variable airfield requirements. Table R-2 referred to by the commenter is simply presenting an FAA definition of "air carrier" aircraft that generally includes aircraft that have more than 60 seats.



-2-

Also, to date, no documentation has been found to support the relatively large distances between the outer east-west runways (27R/9L and 28L/10R) and the nearest parallel runways. (The parallel runway sets closest to the terminal area are 1600 and 1200 feet apart, similar to Atlanta's spacing of 1000 and 1060 feet.) It would seem reasonable to prefer to eliminate airport hangers and parking spaces instead of suburban businesses and residential areas. (Elimination of diagonal runway 32L/4R would permit this for new runway 27R/9L.)

5

As I previously stated earlier this year (in written comments relative to the O'Hare plan), I am willing to meet with local FAA representatives regarding this project. As an original board member and technical advisor to the O'HARE AREA NOISE ABATEMENT COUNCIL -headed up by the late GEORGE FRANKS- I am dedicated to doing doing it right. Otherwise I would not have supported additional east-west runways for a more efficient and safer airport.

6

Richard C Blom

RICHARD C. BLOMBERG
P.O. BOX 292
ELMHURST IL 60126

Comment	Response
5	The Airport Layout Plan and supporting documentation within the *Master Plan* document that the proposed runway lateral separation distances comply with applicable FAA design criteria to ensure safe operations. Current FAA directives (*FAA Order 7110.65* and supplements) include provisions for operations on runways with the proposed spacing, and these were utilized in developing the planned operation. The procedures developed are fully compliant with these directives and are effectively utilized today at O'Hare. The spacing between runways depends on a number of factors, most importantly the intended use of the runway in the airfield. For example, the 4300 foot distance between proposed Runway 10R-28L and Runway 10L-28R allows simultaneous dual precision approaches. In other words, if the runways were closer together and the airfield was operating in adverse weather conditions requiring instrument flight rules, the two runways could not accommodate concurrent landings on the runways, in effect closing one of the runways.
6	Comment noted.

050906_01

Chicago Air Cargo Managers Association
P.O. Box 66228
O'Hare International Airport
Chicago, IL 60666

06 September 2005

Federal Aviation Administration
Attn: Mr. Michael MacMullen,
Airports Environmental Program Manager
Chicago Airports District Office
2300 Devon Avenue
Des Plaines, IL 60018

Dear Mr. MacMullen,

We are submitting this correspondence as a formal submission within the public comment period on the FAA's Final EIS for O'Hare International Airport. Our comments and concerns will be directed at the Alternatives Section of the EIS. Specifically, the air cargo community at O'Hare has serious concerns about the FAA's recent decision to preserve the Rest Haven Cemetery within the footprint of the proposed O'Hare Modernization Plan, Alternative C. Preservation of this cemetery, as opposed to relocation, raises serious safety, security, operational and capacity issues for the new cargo areas being planned for the Southwest quadrant of the airport. 1

As a bit of background, the cargo community has had ongoing contact with representatives of the OMP and Department of the Aviation over the last 18 months. Cargo organizations involved in these discussions include the Chicago Air Cargo Managers' Association (CACMA), the International Air Cargo Assocation of Chicago (IACAC) and the Customs Brokers and Foreign Freight Forwarders Association of Chicago. These organizations, taken as a whole, represent virtually every major participant in the air cargo community in Chicago. Their members employ thousands of employees, move millions of tons of air cargo and are anxious to see O'Hare maintain its position as a viable and vibrant air cargo airport.

These informal discussions centered on the scope and design of cargo areas at O'Hare Airport. While new space is designated west of the existing South Cargo areas for new Cargo aircraft ramps and handling facilities, the majority of the new space seemed to be used for existing cargo facilities relocated by the construction of runway 10C/28C. Since the existing Fedex Metroplex and United Cargo facilities would be directly impacted by the new runway, they would required to be 'made whole' by the OMP process and would therefore receive a significant portion of the space allotted for Cargo in the Airport Layout Plan. 2

Most industry sources predict annual growth rates of 5% for the international air cargo industry over the next 10-12 years. The question posed most often by the cargo community during these discussions: Where would this growth be handled on the new O'Hare airport? 3

Comment	Response
1	Commenter's opinion is noted.
2	Comment noted.
3	In Section 4.3.1 of the Master Plan, the City of Chicago inventoried the existing cargo facilities and projected facility requirements based on cargo forecasts and interviews with the larger cargo carriers. The results of this study indicate that the Cargo would require an additional 55 acres which the City has identified on their Airport Layout Plan. In addition, the City of Chicago has indicated that a more detailed cargo area planning study will be conducted in later planning phases. The FAA would hope that the Chicago Area Cargo Managers Association would request to work with the City of Chicago through out their additional analyses.

We are pleased to report that these discussions with representatives of the OMP and Department of Aviation left most cargo organizations reassured that the 'new O'Hare' would devote sufficient resources to the cargo community. The O'Hare cargo community felt that the future growth needs (including parking/handling of cargo-only aircraft) would not be constrained by lack of resources under the OMP alternatives.

Incumbent in these discussions, however, was that the expanded South Cargo Area would be created without interruption by non-cargo parcels. The FAA's decision to leave Rest Haven Cemetery at its present location creates a cargo area design incompatible with safe and efficient cargo activities in that area. Many members of the cargo community has expressed serious concerns since this decision was made public in late July 2005. 4

We would summarize these concerns into four main areas:

I. Safety of cemetery visitors
II. Security Perimeter
III. Restriction of aircraft ground movement
IV. Reduction of cargo capacity (economic losses)

We will outline each of these areas below. The remarks contained within the outline are based on the following scenario for the expanded South Cargo areas if the Rest Haven Cemetery is maintained at it present location:

1. The Rest Haven Cemetery would be surrounded on the north side by a taxi-way, on the east and west side by working cargo aircraft ramps and the south side by an access road used almost exclusively by air cargo trucking traffic.

2. The new South Cargo Ramp would be split in two. Each would have a single entrance/exit for use by aircraft. There would be no connection between the two new ramps. In essence, there would now be three non-contiguous aircraft ramps in South Cargo: the existing South Cargo ramp bounded on the west by a public road accessing the NW Cargo/Fed Ex Heavy buildings, a new ramp bounded by the same public road on the east and Rest Haven cemetery on the west, and a third cargo ramp bounded by the Rest Haven cemetery on the east and on the west by a taxi-way accessing the new 10R/28L runway.

3. Access to the cemetery would apparently be facilitated through a public access road which would run directly through an area planned for development of cargo handling facilities.

Using this scenario (and we see no other viable ramp designs given the central location of the Rest Haven Cemetery within the proposed cargo areas), we would like to address each area of concern in detail so that the impact of this decision is understood by all. 5

I. **Safety of cemetery visitors** – Aircraft ramps are shown by the Department of Labor to be one of the more dangerous workplaces in America. While many of these dangers are confined to the ramp area itself, certain of the hazards extend over the boundaries of the ramp by their very nature.

Comment	Response
4	The proposed design of the cargo area has been reviewed by the FAA and conforms to all safety requirements. As mentioned in response to comment 3 above, the City of Chicago has indicated that a more detailed cargo area planning study will be conducted in later planning phases. Actual layout of the cargo area including the exact placement of cargo building within the cargo apron will be determined during the period keeping in mind to design the facilities in the most efficient manner.
5	The FAA is confident that the final design of the cargo area will be accomplished in a manner that will preserve Rest Haven Cemetery while also permitting air cargo operations to be conducted efficiently.

A. *Health hazards due to excessive noise from aircraft engines.* As noted in the scenario above, the Resthaven cemetery would be surrounded on 3 sides by working aircraft ramp areas. The decibel levels created by these ramp areas, at such close proximity to the cemetery, represent a hazard level to any cemetery visitors which exceeds those within OSHA guidelines. Ground crews and airline crews routinely wear hearing protection to mitigate this hazard. It seems unlikely that all visitors to the cemetery would be similarly protected. 6

B. *Health hazards due to excessive jet blast.* Upon arrival and departure, the large jumbo jet cargo aircraft (747F, MD-11, etc) generated significant jet blast hazard as they maneuver in/out of their parking areas. These areas extend for hundreds of feet to rear of the aircraft and are well-docmented within the airport safety regulations. Due to its small size and anticipated proximity to the cargo aircraft parking areas, the Resthaven cemetery would be within these blast areas from both adjacent cargo areas. If the cemetery remains in place in the final Airport Layout Plan, we recommend specification of blast fences on the east and west sides of the cemetery to mitigate this hazard. 7

C. *Health Hazards due to Hazardous material incidents.* Cargo carried on cargo aircraft has always contained Hazardous Materials. Many of these materials (radioactive, infectious substances, flammable materials, explosives, etc.) are prohibited from passenger airplanes and must be carefully handled according to published regulations. Regrettably, such materials do occasionally spill and require evacuation of ramp/cargo buildings. Each cargo facility has well-planned evacuation plans for the safety of its employees during such an event. Any visitors to the cemetery would also be subject to such a hazard and outside the evacuation plans for each carrier. Safeguarding such visitors would fall to the airport authorities. We question whether the response to such an event would come in time to prevent the visitors from being exposed to such a spill. 8

II. **Security Perimeter** – Clearly, security at airports has become of our country's top priorities in the post 9-11 area. Airport and TSA guidelines address, among many other points, access to airport ramps, cargo prepared to fly on flights (including passenger) and public vantage points within the airport footprint. We believe the retention of the cemetery raises several difficult points under this critical heading.

A. *Access to aircraft ramps.* The retained cemetery becomes a 'public peninsula' jutting out into the AOA perimeter of the cargo ramps. While we expect such an areas would be secured by the Department of Aviation with the normal AOA Perimeter fencing, etc., any such area where the public (with no business at the airport) can congregate so close to flight operations and fuel supplies is a concern. 9

B. *Cargo prepared to fly on flights (including passenger)* - This is a similar scenario to 'A' above. In this case, however, the threat is more indirect. Cargo is routinely staged on the secure AOA for departure on aircraft. Such a public area located so close to the prepared cargo presents a more difficult security problem than if the AOA has a uniform perimeter without interspersing public areas. 10

C. *Public vantage point within the airport footprint.* By definition, a cemetery area presumes green space, trees, gravestiesetc. Add to these chartacteristics our recommendation of jet blast fences to shield cemetery visitors from that aircraft hazard.... and the cemetery becomes a haven for those who wish to get as close as

Comment	Response
6	The FAA respectfully disagrees with the comment. The FAA's land use compatibility guidelines use the noise metric of Day Night Noise Level (DNL). The baseline noise levels for Rest Haven cemetery are 65.6 DNL and would be 71.2 DNL with the FAA's selected alternative. The FAA's *Part 150 Land Use Compatibility Guidelines* for cemeteries is 85 DNL. Also, if determined necessary by the FAA, there may be blast fences to the north, east, and west of Rest Haven which could further reduce the effect of noise from ground movements of aircraft in the cargo area. In addition, there must be a minimum of 117 feet of distance from the aircraft movement area to either the security fence around the cemetery or the potential blast fences, which ever is closer to the aircraft movement area.
7	As noted in the response above, if determined necessary by the FAA, there may be blast fences to the north, east, and west of Rest Haven which could further reduce the effect of jet blast and noise from ground movements of aircraft in the cargo area. The blast fences would be a minimum of 8 feet high, with a potential maximum of 22 feet high.
8	The air carriers are responsible for the materials they carry, hazardous or not. The City of Chicago Fire Department is responsible for notifying neighboring public and private property owners if hazardous materials threaten the health and safety of individuals or property outside of the airport's boundary.
9	The City of Chicago will install a security fence, meeting Transportation Security Administration (TSA) security requirements for airports, to surround the cemetery property. The FAA notes that the St. Johannes Cemetery is currently located on a "peninsula" within the AOA.
10	See response to comment 9 above.

possible to aircraft arriving/departing the airport. Such hidden proximity has obvious security consequences. 11

III. **Restriction of AOA ground movement** - Using the scenario outlined earlier, the South Cargo area of O'Hare airport would be developed around three non-contiguious aircraft ramps –this configuration has operational impacts in several ways. 12

A. *Restricted access to two cargo aircraft ramp areas* – Each new cargo ramp, separated by the Rest Haven cemetery, would now only have one way/one way out. This has implications for fuel burn for the aircraft (important to the airlines, perhaps not so important to the overall FAA criteria) but also has potential for a major operational incident. Many of the cargo airlines that function on the airport are working on extremely tight schedules. These schedules may be dictated by curfews at other airports, arrival schedules at domestic hubs, crew scheduling parameters, etc. By having only one way out of the ramps, any mechanical or ramp incident which blocks that egress effectively closes down ground traffic and traps planes within the ramp area. This scenario was not an issue under the previous ALP which showed two taxiways entering the new South Cargo ramp area.

B. *Interline transfer of freight* – The way of the airline world has become one of alliances and partnerships. A frequent outgrowth of these agreements if transfer of cargo from one carrier to another. Since each of the new cargo ramps might be 'isolated' from the other cargo ramp areas (only way out is by aircraft), such freight may have to be transferred the 300-400 yards via landside (truck) rather than rampside. This presents not only an economic burden on the airlines but also raises security issues as well.

IV. **Reduction of Cargo Capacity** – As mentioned at the outset, the cargo community has been quite concerned about the future resources devoted to handling of cargo on the 'new O'Hare'. These concerns are well founded; absent a firm plan for cargo handling at the old military ramp on the north side of the airport, the space allocated for new cargo areas seemed to be minimal when the relocation of operations affected by 10C/28R was taken into account. The retention of the Rest Haven cemetery further restricts the options for future cargo handling areas.

A. *Loss of Cargo Aircraft Parking spaces*– While it is difficult to estimate the exact number of parking spots lost to Rest Haven, one can easily foresee that two aircraft parking spots are no longer available due to the the intrusion of the 'peninsula' into the new South Cargo areas. While two spots does not seem significant, if one assumes each spot would be used once daily by a 747F freighter/300 days per year with payload of 80 Tons in/80 tons out (all conservative assumptions):

- Loss of 48,000,000 kgs of export capacity/48,000,000 kgs of import capacity due to no place to park the aircraft.
- Assuming 100,000 kg/month/warehouse employee (a common logistics assumption) this means 80 airport warehouse jobs are not realized as well as further employment implications which are difficult to calculate (truckers, freight forwarders, custom brokers, etc.).
- Access to foreign markets (both import and export) reduced for Chicago area manufactureres, distributors and consumers.

Comment	Response
11	The trees currently surrounding Rest Haven Cemetery will be removed with the FAA's selected alternative. See also response to comment 9 above.
12	See response to comment 5 above.

B. *Loss of Cargo Facility Development* Area – It is clear that some sort of public access road would have to be maintained to allow visitors to the cemetery to reach the grounds. Such a road would be placed, out of necessity, directly south of the cemetery grounds and connected to the main cargo road winding through the cargo area.

1. One of the primary concerns of the O'Hare Cargo community is the current lack of on-airport facilities for cargo warehouses/handling. This dearth of facilities would be made worse by the annexation/destruction of several current industrial developments south and west of the current South Cargo area (i.e. ProLogis, etc.). Removing any real estate from prime on-airport, on-ramp locations (as would be the case with the retention of Rest Haven) only serves to exacerbate this shortage. 12

When all aspects of this issue are taken into account, we believe it is self-evident that the long-term impact of retaining Rest Haven Cemetery in its current location on safety, security and commerce is significant and outweighs the regrettable short-term impact of moving the cemetery to a new location more appropriate for its long-term future.

We urgently request that the FAA approve re-locating the Rest Haven Cemetery as part of its Record of Decision. 13

Please feel free to contact me if you have any further questions or comments on this submission. I can be reached at the CACMA mailing address contained within our letterhead, by E-mail at CACMAcargo@sbcglobal.net or by telephone at 847/571-1971. 14

Thank you in advance for your consideration.

Sincerely,

Daniel Gadow
2005 CACMA Chairman

Comment	Response
12	See response to comment 5 above.
13	The FAA respectfully disagrees with the commenter's opinion. The FAA has evaluated the feasibility of retaining Rest Haven cemetery in its present location and determined it would not impair the safety or efficiency of the operation.
14	Comment noted.

050906_02

BEFORE THE
FEDERAL AVIATION ADMINISTRATION
CHICAGO AIRPORTS DISTRICT OFFICE

In the matter of the	)
FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE O'HARE MODERNIZATION PROGRAM (OMP)	)

COMMENTS ON AND OBJECTIONS TO THE FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE O'HARE MODERNIZATION PROGRAM

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September 6, 2005

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BEFORE THE
FEDERAL AVIATION ADMINISTRATION
CHICAGO AIRPORTS DISTRICT OFFICE

In the matter of the	)
FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE O'HARE MODERNIZATION PROGRAM (OMP)	)

COMMENTS ON AND OBJECTIONS TO THE FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE O'HARE MODERNIZATION PROGRAM

The Village of Bensenville and Elk Grove Village (the "Community Objectors"), St. John's United Church of Christ, Helen Runge, Shirley Steele, Rest Haven Cemetery Association, Robert Placek and Leroy Heinrich (the "Religious Objectors") and Roxanne Mitchell representing the Homeowner Objectors hereby submit these comments[1] on and objections to the FAA's Final Environmental Impact Statement ("FEIS") for the O'Hare Modernization Program ("OMP").

I. Introduction.

Preliminarily, the Objectors renew their objection to the refusal of the FAA to extend the comment period for the Final EIS ("FEIS") beyond the day after Labor Day, September 6, 2005. On July 28, 2005,

[1] The Community, Religious and Homeowner Objectors are collectively referred herein to as the "Objectors."

the FAA delivered FEIS documents, spanning ten volumes and several thousand of pages, including hundreds of pages of new detailed technical materials and discussion by the FAA not previously presented in the Draft Environmental Impact Statement ("DEIS") — many of the new FEIS material and documents were cross-referenced to several hundred other technical documents and materials.

Further, the FAA continues to fail to respond fully to our clients' outstanding FOIA requests by withholding thousands of pages of documents of critical relevance to the issues raised by the interrelated requests by Chicago for FAA approvals and funding for OMP Phase 1, and the full build OMP-Master Plan ALP. As we stated in our letter to Mr. Cooper on August 26, 2005 (enclosed), FAA's refusal to extend the time period — coupled with FAA's continued stonewalling by refusing to produce relevant documents — constitute clear cut denials of our clients' due process rights and impair our clients' ability to present meaningful and relevant rebuttal comments and evidence in response to the FAA's FEIS.

Nevertheless, we will continue to analyze the FEIS and FAA's comments and reserve the right to file supplemental comments after September 6, 2005.

Based on the limited examination we have been able to perform in the unreasonably short time allowed for comments, it is clear that the FAA has manipulated the data ("cooked the books") to reach a pre-determined result to approve the City's and FAA's Preferred Alternative and to reject all other alternatives. The following discusses

the serious errors and flaws in the FEIS that we have identified in the limited time we have had for review of that document. 1

II. FAA's Cruel Hoax of Environmental and Religious Protection.

FAA has told the public that FAA would carefully consider the need to protect homes, businesses, parklands and the religious cemeteries within the framework of federal environmental laws and religious protection laws. Just the opposite is now clear. The FAA in the FEIS has stated that it intends to give Chicago the green light to bulldoze the homes, businesses and parklands in our communities and St. Johannes Cemetery before the FAA ever reaches a determination of on the inextricably linked OMP funding decisions: i.e., whether the project is economically feasible, whether the City will obtain all of the federal funds the City requires, and whether there are sufficient sources of non-federal funds to finance/build the project.

In a cruel irony, FAA now says that when it gets around to its funding decisions for AIP and PFCs, it will consider harm to homes, business, parks and St. Johannes Cemetery — and alternatives to avoid that harm — at the time FAA makes its funding decisions. However, since the homes, business, parks and St. Johannes Cemetery will have already been destroyed, there will not be anything left to protect!

The FAA's funding decisions for this project are governed by the federal laws at issue here; i.e., NEPA, Section 4(f), Section 106, and by the federal Religious Freedom Restoration Act. The fundamental

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Comment	Response
1	The FAA disagrees with the commenter's characterization of the FAA's evaluation. The FAA has provided detailed responses to each of the following sections of this filing by the commenter which outline the basis for FAA's disagreement. The FAA addressed the commenter's request for extension in a letter to Mr. Joseph Karaganis dated August 26, 2005. The letter outlined the rationale for the denial of the request for extension; the letter also stated, "[the Agency] will, however, review and respond to comments received after the close of the comment period, to the extent practicable, before issuance of our Record of Decision." With regard to FOIA, the FAA directs the commenter to Section 8.1 of the Record of Decision.

objective of these environmental and religious protection statutes is that the destruction of the impacted resources should not take place until and unless the FAA makes its decisions on the merits of the project, including the funding issues which are critical to whether or not OMP can actually proceed. To allow the destruction to occur before the funding decisions are made would make a mockery of the law.

FAA's callous indifference to legal protections afforded to the communities and the religious cemeteries is particularly egregious in light of the complete collapse of the financial house of cards on which the City's financial plan and its funding requests for OMP Master Plan and Phase One are premised (see discussion below).

It would be a travesty of justice and violation of law for FAA to allow the destruction to proceed prior to determining the merits of the critical funding requests, when there is a strong likelihood that the FAA is prohibited by federal law from funding either Phase One or the full build OMP-Master Plan. Allowing the "destruction before decision" will create an unnecessary wasteland for a project that is likely never to materialize.

2

III. The Evidence in the Record is Overwhelming that the Full Build OMP - Master Plan Cannot be Financed.

As we have stated several times, Chicago cannot assemble the financing for the full build OMP-Master Plan. The likely problems with financing were emphasized in a July 2005 report by the DOT Inspector General. We incorporate by reference into these comments the DOT Inspector General's Report which is attached hereto. The Inspector General stated that FAA had possession of the report since

Comment	Response
2	The FAA rejects the commenter's contention that harm as described in their document has yet to be identified or considered. The Final EIS is replete with a comprehensive analysis of environmental and other impacts associated with the OMP. This process is intended to fully satisfy all of the FAA's obligations associated with this project, including the FAA finding that of eligibility for federal grant-in-aid funds and or PFC. It is not the Agency's intention to replicate these analyses as part of any funding decisions that may follow shortly after this Record of Decision. The FAA directs the commenter to Section 10.1.1 of the Record of Decision for FAA's consideration of these issues.

April of 2005 yet no mention is made in the FEIS of the serious financing concerns raised by the Inspector General.

The Sources of Money FAA Says Will Be Needed

Project Element	FAA-Chicago cost	AIP entitlement	AIP discretionary	PFC pay as go	PFC Bonds	GARBS	Third Party or Special Facility Financing
OMP	$7,087,000,000	$70,870,000	$566,960,000	$141,740,000	$1,417,400,000	$4,181,330,000	$708,700,000
WGP	$2,977,000,000					$2,322,060,000	$654,940,000
CIP	$4,128,000,000		$247,680,000	$454,080,000	$1,238,400,000	$2,229,120,000	
Total	**$14,192,000,000**		**$814,640,000**	**$595,820,000**	**$2,655,800,000**	**$8,732,510,000**	**$1,363,640,000**

Source Tables 15 and 16 FAA D-EIS, Executive Summary- individual cost amounts based on percentages presented in Table 16—amounts do not reconcile due to rounding

When one examines the $14.2 billion dollar estimate put forward by FAA, it becomes readily apparent — consistent with the concerns raised by the Inspector General — that Chicago cannot assemble the money needed to build the full build OMP-Master Plan:

A. FAA is prohibited by law from funding the $800 million AIP discretionary money needed by Chicago because the benefits of the full build OMP-Master Plan do not exceed the costs.

B. FAA is prohibited from authorizing the more than $3 billion in PFC money that FAA says Chicago will need for the full build OMP-Master Plan because federal law prohibits FAA from authorizing PFCs unless there is sufficient money from non-PFC sources to pay for the

remaining cost of the project. Without the $800 million in AIP discretionary, FAA cannot authorize the PFC funds.

C. There is no assurance from the Majority In Interest (MII) airlines that they will agree to pay the more than $8 Billion in General Airport Revenue Bonds needed for the full build OMP-Master Plan. The likelihood that the airlines will not agree is increased by the airlines' past refusal to provide MII approval for the terminal components of the project.

D. Finally, there is no evidence that there is any source of special facility or third party financing available to pay the more than $1.3 billion component that Chicago and the FAA say must come from those sources.

FAA is silent on these problems, resorting again (as it did in the DEIS) to an unsupported "assumption" that the money will be available. Given the facts stated above, there is simply no basis for "assuming" that $14.2 billion will be available to build the full build OMP-Master Plan.

3

IV. The Evidence in This Record Is Overwhelming That There Are Insufficient Funds To Build Phase One.

There are also insufficient funds to build Phase One. FAA fails to address or even acknowledge several problems with Phase One financing that create the high probability that Phase One cannot be funded:

A. Chicago's $300 million application for discretionary AIP funding fails because the request fails the statutory benefit-cost test; the record shows that the benefits of the Phase

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Comment	Response
3	The EIS is a public document, a draft report from the Department of Transportation Office of Inspector General was not public at that time. The FAA did not mention the Draft report in the Final EIS, because it believed it would be inappropriate to discuss a government document not yet made public. With regard to the comments 3A-3D, the FAA directs the commenter to the responses the Campbell affidavit filed as an attachment to this document, beginning on page A.2-101 of this Appendix A. In addition, the FAA respectfully disagrees with the commenter's assertion that FAA has made an "unsupported assumption" regarding the financing plan for the OMP. The Final EIS and the administrative record accurately document the agency's thorough consideration of the financial feasibility of the full-build OMP in the satisfaction of its environmental obligations.

One project are less than the costs. We hereby incorporate by reference and adopt for this record the June 3, 2005 submission of the Community and Religious Objectors in opposition to the City's AIP/LOI request and the accompanying analysis prepared by Campbell Hill Aviation Group, Inc. entitled "Chicago's O'Hare Modernization Program Fails to Meet The FAA Tests For Benefit-Cost Justification."

B. Based on available public information the $2.9 billion dollar financing plan for Phase One does not include the required Lima Lima taxiway and Chicago has not presented a funding source for the Lima Lima component. According to press reports, the cost of Lima Lima exceeds $250 million.

C. As noted by the Inspector General, the federal PFC statute and the federal statute governing the issuance of entitlement funds prohibits FAA from authorizing PFC funds or from awarding even entitlement AIP funds unless the FAA has clear evidence that sufficient funding sources are available to pay for the balance of the project. The shortfall in Phase One financing caused by the failure of the discretionary AIP component ($300 million) or the Lima Lima taxiway component ($200 plus million) — either individually or in combination — prohibit the FAA from authorizing the more than $1 billion in PFC funds sought

by Chicago for Phase One or the $63 million in AIP entitlement funds sought for Phase One.

Given the likely failure of Phase One financing, it is unconscionable for FAA to allow Chicago to proceed with bulldozing the communities and the homes, businesses and park lands and St. Johannes Cemetery before FAA addresses the critical funding issue for Phase One. 4

V. The Time Period of Analysis is Wrong.

One of the most significant defects of the FEIS is the FAA's arbitrary decision to cut off all analysis of impacts and alternatives after 2018 — using an unreasonably short period of only five years after the project opens to examine the impacts of the Preferred Alternative and all other alternatives. This crabbed and truncated period of analysis (coupled with the inaccurate and improper use of the 2002 TAF (discussed infra)) artificially enabled FAA to ignore the impacts of the rapidly rising exponential delay curve which will shortly produce delays for the full build OMP equal to if not greater than historic high levels. Moreover, the rising exponential delays that would be experienced soon after the arbitrary five year cut-off date applied by the FAA would have been even greater if FAA used the more recent 2003 TAF or even the low-ball 2004 TAF.

There is no reasonable basis for applying a five year cut-off for a project of this immense magnitude, especially since application of such a short analytical cut-off time date covers up the delay impacts that FAA's own analysis shows would occur in later years and completely

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Comment	Response
4	The FAA disagrees with the commenter regarding the funding of Phase I and the full build OMP. The FAA addresses these issues in Section 1.7 of the Final EIS. A. Section 10.1.1 of this ROD describes the general parameters of inquiry for FAA approval to amend an ALP. This Section also describes the delineation in analysis and authorization between those matters considered in the ALP process and those that are more appropriately addressed in reviewing an application for funding under the Airport and Airway Improvement Act. To the extent that the issues raised by this comment have implications for the adequacy of the FAA's environmental analysis, we refer the commenter to the following documents: Section 1.7 of the Final EIS, Appendix U of the Final EIS where these very issues were raised and responded to in considerable detail and elsewhere in this Appendix A of this ROD where the FAA has further analyzed some of these contentions. In particular in response to comments on the Final EIS, the Agency has conducted a sensitivity assessment of the City's financing plan. This sensitivity assessment examined a number of mechanisms the City could employ should part of the funding for the project not be implemented as planned. These mechanisms include deferral of improvements, use of contingency, increased debt issuance, and short-term borrowing. The sensitivity analysis evaluated what-if scenarios, such as the $300 million LOI being unavailable or disapproved, reduction in airline traffic with the loss of a major carrier at O'Hare, and the possibility that the authorized level of PFC collection is static. The sensitivity assessment demonstrated that changes in cost per enplaned passenger resulting from the use of these mechanisms would not be substantial and in some instances could be offset by cost benefits from the project's implementation. B. The cost of the Lima Lima taxiway was included in the City's financing plan. Recent correspondence with the City of Chicago has confirmed the City's intention to construct Taxiway Lima Lima according to the proposed phasing plan utilized for the EIS. In addition, the City of Chicago's Airport Layout Plan submitted in September 2005 for approval contains Taxiway Lima Lima on the Phase I drawing and the future full-build drawing. C. The FAA will comply with applicable statutes governing PFC approval or authorization of AIP grants.

undermines the FAA's findings and conclusions in support of the Preferred Alternative.

Moreover, application of a five year time period of analysis is wholly inconsistent with FAA's requirements for the Master Plan for the OMP and for AIP grants. Thus, FAA issued an AIP master planning grant to Chicago in 2002 which had a Time Period of Analysis to the year 2030. Moreover as required as a condition for FAA to evaluate and decide on Chicago's AIP grant application for OMP, FAA required Chicago to use a Time Period of Analysis from the opening year of the OMP (2013) to 2032 . This is a standard FAA requirement of a Time Period of Analysis from the year the project opens to 20 years later.

By using only a short 5 year Time Period of Analysis FAA was able to select OMP and discard several other alternatives because only the 5 year Time Period of Analysis gave FAA exactly the right answer it was seeking. Only OMP could meet the "unconstrained demand" until 2018 (and even then only by using the outdated and unreasonably low 2002 TAF). Any alternative that could not meet unconstrained demand was then summarily discarded from further meaningful consideration.

This arbitrarily truncated analytical approach artificially gave the FAA a false basis to categorically reject every other alternative that involved a level of development less than full build OMP-Master Plan on the phony predicate that such alternative would not meet "unconstrained demand" until 2018.

By putting the analytical blinders on impacts after 2018, FAA ignores the undisputed fact that the full build OMP-Master Plan, which even under the 2004 uncorrected TAF runs out of capacity (i.e., exceeds FAA's 15 minute AAAW standard) and fails to meet "unconstrained demand" by 2023, and beyond, thus requiring use of the very blended alternative that FAA rejected.

5

VI. The Use of the 2002 Terminal Area Forecast is Wrong.

The outcome of environmental impacts, delay comparisons, capacity calculations, alternatives analysis, and a host of other important factors is driven by the Demand Forecast. FAA unreasonably persists in using the out-dated and understated 2002 Terminal Area Forecast (TAF). The record demonstrates that results would be dramatically different if FAA had used more frequent forecasts such as 2003 and 2004 TAFs.

FAA claims that it needed to use the 2002 TAF because it requires at least 12 months to perform delay-capacity simulation modeling. That assertion is without merit. First, the FAA had the more recent 2003 TAF for over a year before the DEIS was issued. Second, FAA and its contractors were in fact conducting delay-capacity simulation modeling as to existing O'Hare and full build OMP-Master Plan — using the 2003 TAF — ***before*** FAA completed the DEIS and even before FAA did several of the TAAMs model runs for the DEIS using the 2002 TAF.

FAA's second excuse for using the outdated 2002 TAF is that the 2004 TAF somehow "validates" the use of the 2003 TAF. However

Comment	Response
5	The FAA respectfully disagrees. The commenter is directed to Section 10.1.2 of this ROD where the various planning horizons are discussed and placed in their proper perspectives. The FAA acknowledges that at some point beyond the "reasonably foreseeable" future O'Hare, even after improvements, could return to high levels of delay. However, this possibility does not negate the benefits that the OMP will produce. The OMP airfield will serve an additional 220,000 operations per year at a level of delay that is a fraction (~6 minutes per operation) of that experienced by the airport today (~17 minutes per operation). Finally, the FAA notes that the financial analysis, conducted as part of the Agency's review of the LOI request, will utilize the longer time period as required to evaluate the OMP from a benefit-cost perspective.

there are two reasons that FAA's "validation" argument does not hold water.

First, the 2004 TAF — without the necessary correction discussed below— produces dramatically different results than the 2002 TAF. Under the 2004 TAF, full build OMP-Master Plan hits the FAA's 15 minute AAAW wall in 2023 and — because of the added taxi penalty due to the further outer runways of OMP which FAA did not consider— loses any time saving advantage by 2019. This means that even under the extreme and unprecedented 15 minute AAAW standard used in the FEIS, OMP will have no delay savings by 2019 and will be totally out of capacity by 2023 (and likely sooner) and as a result FAA will be required to employ congestion management with full build OMP-Master Plan under the uncorrected 2004 TAF by 2023, and likely sooner.

6

Further, if one uses the definitions of practical capacity used by FAA in Denver, Philadelphia, Boston and other airports (*i.e.*, a maximum of 10 minutes AAAW delay) full build OMP-Master Plan will be out of capacity by 2019 (even under the 2004 TAF).

Here is what the DOT said about what occurs with 8-10 minute AAAW delays, the condition that will exist at the full build OMP-Master Plan in the 2018-2019 time frame using the uncorrected 2004 TAF:

- ***8 to 10 minutes of delay per operation: increasing VFR delays in peak hours with translation to shoulder hours in all but optimum conditions; high delay in IFR with resulting flight cancellations.***
- ***Over 10 minutes of delay per operation: VFR operations***

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Comment	Response
6	FAA acknowledges that the 2003 TAF was issued in February 2004, about one year before the DEIS was issued in January 2005. However, the work necessary to produce a DEIS in January 2005 was initiated before the 2003 TAF was available. Analytical work on airline flight schedules and other derivative forecasts required to complete the complex technical analyses reported in the DEIS were initiated in early 2003, and continued through the end of 2004. FAA determined that "re-starting" such analyses after publication of the 2003 TAF, which occurred in the middle of such detailed technical analyses, would significantly delay the completion of such analyses and the resulting DEIS. For a project of OMP's magnitude and complexity, the comprehensive analyses required by the FAA necessitated more than one year of analysis. FAA determined that it would be appropriate to conduct sensitivity analysis of any new forecasts produced during the course of the EIS analysis. This is fully explained in the Final EIS (including the letter from FAA approving the use of the 2002 TAF and the requirement to conduct sensitivity analysis on subsequent TAF results), and the sensitivity analysis is documented in Appendix R of the Final EIS. In addition, please see Section 4 of the ROD. FAA believes that the commenter may have the facts somewhat confused. FAA has not attempted to validate the use of the 2003 TAF, but has instead validated the use of the 2002 TAF. The remainder of this response is prepared assuming that the commenter meant to refer to validation of the 2002 TAF. FAA has addressed the significance of potential new forecasts—including the 2003 TAF and the 2004 TAF—in Appendix R of the Final EIS. FAA has acknowledged that future conditions may be different from those represented by the 2002 TAF, and this is the reason for including Appendix R in the Final EIS. The FAA respectfully disagrees with the commenter's assertion that additional taxitimes were not considered. The FAA, in their comprehensive TAAM analysis, included all aircraft movements: both on the airfield and in the airspace. Published results of the TAAM modeling showed the unimpeded travel times for each configuration modeled as well as the annual average for each alternative. The travel times were also included in the evaluation of the environmental impacts including air quality (time in mode) and noise impacts (day/night distribution) for all configuration in all alternatives modeled.

Comment	Response
7	The FAA has addressed Campbell-Hill's comment regarding practical capacity in their April 6, 2005 submittal, please see response to comments 44-47 beginning on page U.4-528 in Appendix U of the Final EIS.

experience increasing delays in peak periods and shoulder hours in all but optimum conditions; very high delays in IFR resulting in extensive flight cancellations.

***

...[W]hen the AAAW delay per operation reaches **6 minutes**, project planning, engineering and design of capacity improvements should be actively pursued. When AAAW delay reaches **eight minutes**, implementation of capacity improvements should be underway.

1995 DOT HDR Report, Technical Supplement # 3, page D-2 (emphasis added in bold underscore and italics).

7

Using the uncorrected 2004 TAF, which will produce delays (exclusive of added taxi time penalty) of 8-10 minutes AAAW, O'Hare under the full build OMP-Master Plan will experience unacceptable conditions in the 2017-2019 time frame. In short, OMP does NOT meet the stated purpose and need to meet forecast demand at acceptable levels of delay.

The discussion immediately above is premised on the use of the uncorrected 2004 TAF. But according to Campbell Hill Aviation Group, the economic variables which FAA used in the 2004 TAF should have produced higher enplanements and operations in the 2004 TAF than in the 2003 TAF. In other words, with the corrections that should be made to the 2004 TAF to reflect the use of higher values for the higher economic variables, the corrected 2004 TAF would result in even higher delays far sooner than the uncorrected 2004 TAF and higher delays far sooner than even the 2003 TAF. See, affidavit of Brian Campbell, Chairman of Campbell Hill Aviation Group, attached hereto.

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FAA in the FEIS tries to hide behind its self-proclaimed "expertise" as to the mysterious and unexplained major drop in enplanements between the 2003 and 2004 TAFs. But internal FAA documents demonstrate that the 2004 TAF for O'Hare is defective and cannot be used. Thus, after months of FOIA requests, FAA on August 26, 2005, finally produced what FAA said were the working documents for the 2002-2004 TAFs.

These documents confirm that, as our economic experts had demonstrated, the economic variables used for the 2004 TAF showed a ***higher rate of growth*** than the 2003 TAF. This higher rate of growth should have— using the "industry standard" methodology FAA claims its "experts" followed— produced a higher level of enplanements and a higher level of operations for the 2004 TAF than the 2003 TAF.

Moreover, the limited documents provided by FAA as the purported basis of the 2004 TAF did not contain the data or the calculations by which our trained forecasting experts could replicate or recreate the forecast results for enplanements and operations contained in the 2004 TAF. Put bluntly, the TAF working papers produced at figuratively the eleventh hour on August 26, 2005 cannot support an audit trail that leads from the working papers to the forecast results for enplanements and operations contained in the 2004 TAF.

Had a corrected 2004 TAF (with higher values than the 2003 TAF) been used, it would have resulted in full build OMP-Master Plan being out of capacity (*i.e.*, hitting the FAA's 15 minute AAAW ceiling) well ***before 2018*** and requiring the FAA to employ after that time a

blended alternative (*i.e.*, demand management plus use of other airports) with full build OMP-Master Plan. 8

VII. The FEIS Uses the Wrong Base Case.

Using the outdated 2002 TAF demand forecast, the FEIS says the Base Case (so-called "No Action") will represent a delay level of 17.2 minutes AAAW in the year 2018 vs. a delay level of 5.8 minutes AAAW for the full build OMP-Master Plan. Yet the modeling for the Base Case was premised on conditions at O'Hare in 2003 and 2004 — before the FAA instituted the current scheduling order of 88 arrivals per hour.

The FAA states in the FEIS that the 17.2 minute projected delay compares with the delay experienced in 2004 and recorded in the FAA's ASPM database. We strongly contest the correlation and consistency of ASPM values with modeled TAAM values because of the significant differences of key variables between the two methods of delay measurement or prediction — including the wide variation in IFR weather conditions. However, a fundamental defect of the FAA's analysis is that the TAAM modeling that FAA did for the Base Case No Action scenario did not include the TAAM modeling of the effects of the FAA scheduling order.

Since the existing FAA scheduling order represents the existing condition at O'Hare, FAA should have performed TAAM modeling with the scheduling order in place. Based on the significant reduction in delays experienced under the scheduling order, the 17.2 minute TAAM

Comment	Response
8	The commenter suggests that the 2004 TAF should be "corrected" in accordance with assumptions developed by the commenter's consultant, Campbell-Hill. FAA has separately responded to this assertion, and on the basis of this response, does not agree with the commenter. Please see response to comments 75-81 of the Campbell affidavit, beginning on page A.2-101 of this Appendix A.

modeling delay attributed to the base case significantly overstates the delay that FAA should attribute to the existing airport.[2]

This failure is significant in and of itself; but when compared and added to the flaws in the delays savings claimed for the full build OMP-Master Plan discussed herein, this failing demonstrates that FAA's claimed delay savings are virtually non-existent. 9

VIII. FAA Continues to Hide ASV and Other Delay Information for O'Hare and Other OEP Airports Which Objected Have Requested in Long Delayed FOIA Requests.

Despite our repeated requests (see, *e.g.*, our June and August FOIA correspondence attached hereto) FAA continues to hide critical and relevant information on delay and capacity from the Objectors and from the EIS process.

For example, in the FEIS FAA says that the Annual Service Volume (ASV) is irrelevant to the issue of capacity and delay. Yet other FAA publications (see our FOIA correspondence) state that ASV has been (and is) calculated for O'Hare and for the other OEP (Operational Evolution Plan Airports in the country. Further, these same publications state that FAA has calculated ASV (which FAA uses as a capacity standard) for existing O'Hare and for the full build OMP-Master Plan.

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[2] The FAA continues to assert that O'Hare ranks in the top 5 airports in terms of delay as measured by the various FAA and DOT databases. On the contrary, O'Hare ranks well below the top five in all of these databases since the scheduling order took effect. According to the Inspector General in a May 2005 report, O'Hare ranked 14th among the major airports in delays.

Comment	Response
9	The FAA disagrees with the commenter's assertion that FAA utilized the wrong base case for the EIS. The extensive environmental analysis began in 2002 and therefore 2002 was used as the base case; this is standard practice for evaluating alternatives in an environmental impact statement. In addition, the imposition of the 2004 scheduling order represents, as stated in that order, an interim solution to a long term problem of delay. As a temporary situation it would have been inappropriate to rely on such an artificially constrained environment for a base case. Moreover, the commenter is simply wrong in suggesting that as a result of using the 2002 TAF as the base case for its conclusions that delay is overstated. With the scheduling order in place for 11 months of the year, ASPM data for calendar year 2004 revealed an average annual delay of approximately 18 minutes per operation and 990,000 operations. In contrast, the 2002 EIS base case reflected some 16,000 fewer operations. Therefore, were the FAA to model the No Action Alternative using the higher level of operations that are permitted under the current scheduling order (990,000 operations), then the EIS base case (974,000 operations) as the commenter is suggesting, the levels of delay projected by the simulation modeling would likely be even higher. This would naturally result in a greater difference between the average annual delay of the No Action Alternative and the OMP.

The relevance of this hidden information is clear. If, as we know, FAA has performed ASV capacity calculations on O'Hare and other major OEP airports, we believe that the delay value (i.e., minutes of AAAW) that FAA has used as an acceptable level of delay with which to calculate practical capacity and Annual Service Volume is far lower than the 15 minute ceiling used in the FEIS. We believe the hidden information demonstrates that the practical capacity of the full build OMP-Master Plan — using these hidden ASV numbers — is far less than claimed by FAA. Further, these hidden ASV values likely also reveal that full build OMP-Master Plan will run out of capacity far sooner than suggested by FAA in the FEIS.

The ASV values are not the only area of critical documents hidden by FAA. Objectors have asked in their FOIA request for the capacity and delay calculations made by the MITRE Corporation for MITRE's 2004 capacity study. That study included several different capacity calculations for existing O'Hare and for full build OMP-Master Plan. Despite the relevance of these calculations by MITRE and despite Objectors request for this information, the material remains hidden and was not available for review in the FEIS process.

Similarly, MITRE performed delay and capacity calculations and modeling for existing O'Hare for the FAA as part of the scheduling order process. That information has also been withheld.

10

This hidden information also has relevance in another area. FAA makes the unsupported claim in the FEIS that it could not model the

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Comment	Response
10	With regard to FOIA, the FAA directs the commenter to Section 8.1 of the Record of Decision. The FAA rejects the commenter's assertion that the Agency has hidden or ignored ASV and other delay information in considering the OMP. The FAA notes that the ASV calculations done as part of the Appendix C of the Final EIS did not include an assessment of the performance of ORD improvements. The FAA did not rely on ASV calculations for O'Hare in the development of the EIS. With regard to the MITRE analyses cited by the commenter, the FAA did not utilize this information in the development of the EIS because the TAAM analysis provides a more comprehensive assessment of alternatives from an operational perspective. The FAA and TPC participated in an intensive, nine month review process during this simulation effort. The objective of this process was to ensure that TAAM input assumptions, modeling methodologies, and output data conformed to industry best modeling practices and accurately reflected air traffic control rules and procedures. In total, the FAA invested over 2,000 hours reviewing assumptions, draft results, animations, and final results. The FAA review was conducted by an Air Traffic Work Group consisting of: FAA Management and National Air Traffic Controller Association (NATCA) representatives from O'Hare Tower, the Chicago Terminal Radar Approach Control Facility (TRACON), and the Chicago Center (ZAU); FAA Airports Division; and the FAA's TPC.

2003 Terminal Area Forecast (TAF) because it would take too long. [3] Yet according to MITRE's 2004 capacity study, MITRE was able to model existing O'Hare and the full build OMP-Master Plan with the 2003 TAF several months before FAA conducted its modeling and several months before FAA issued the DEIS.

For FAA to approve — and fund (to the tune of billions of federally authorized taxpayer dollars) — a project using outdated two year old forecast data is indefensible.

11

IX. The FAA Produces Erroneous Claims of Delay Savings.

A key claim by FAA is that full build OMP-Master Plan produces less delay per flight operation than either the existing O'Hare or any of the blended alternatives. This claim is erroneous for several reasons.

First, as noted above, FAA has failed to model the Base Case with the controls of the FAA scheduling order input into the TAAM model. Inclusion of the scheduling order controls would likely substantially reduce the 17.2 minute delay previously modeled for the existing airport.

Second, as delay goes up with OMP, the delay savings differential (*i.e.*, the difference between existing O'Hare and OMP) goes down. Thus while FAA claims a 5.8 minute AAAW for OMP in 2018, use of

[3] FAA provides no evidence to support this claim. Once a model is set up on a computer with appropriate parameters, it is difficult to believe that it would take a year simply to run the 2003 or 2004 TAF through the same model. Indeed, our preliminary ongoing inquiry with a leading experienced computer model expert suggests that the 2003 or 2004 TAFs could have been run through the model in a few weeks. See, affidavit of Tung Lee.

Comment	Response
11	The FAA's rationale for declining to model the 2003 TAF is not based upon an evaluation of the time it would take. The FAA does not need to rerun models to make professional analytical judgments regarding the effects of an alternative level of activity within a reasonable range such as the 2003 TAF. The FAA has held consistently that as more recent TAFs were made available the FAA would reexamine the appropriateness of the use of the 2002 TAF. Appendix R of the Final EIS is an example of the work conducted in such an examination. The range of activity presented in Appendix R encompasses the levels of activity presented in the 2003 and 2004 TAF. The FAA disagrees with the estimate of time required to conduct a thorough and complete modeling evaluation for the purposes of the EIS. The commenter's time estimate largely deals with the actual time to run the model and not the additional work necessary to validate and interpret the results for their subsequent use. The commenter is neglecting a number of factors in the estimating the amount of time necessary for an adequate modeling assessment. For further information regarding the time required for modeling, please see the response to the Le affidavit, beginning on page A.2-98.

the uncorrected 2004 TAF has OMP reaching this value in 2015 and (based on interpolation between the 1.4 million demand in 2023 —13-16 minutes AAAW per Appendix R) reaching approximately 8-10 minutes AAAW in 2018.

When one adds the added taxi time penalty due to OMP's distant runways (approximately an additional 6.5 minutes per operation), any claimed passenger and airline operation time savings disappear by 2018 and likely sooner given the overstatement of Base Case delay noted above!

12

X. The FAA's Arbitrary Refusal to Explore Blended Alternatives.

The analysis above demonstrates how FAA has artificially manipulated key elements— 1) the Time Period of Analysis, 2) the Demand Forecast, and 3) the Level of Acceptable Delay — to produce the only answer FAA wanted, *i.e.,* approval and funding of the full build OMP-Master Plan. FAA used this same manipulation to reject consideration of other viable alternatives — several of which would avoid the destruction of homes, businesses, parklands and the destruction of St. Johannes Cemetery.

However, as described above, the use of even the uncorrected 2004 TAF and a Time Period of Analysis extending just 5 years beyond FAA's crabbed analysis demonstrates that FAA will be compelled to employ demand management and other airports as part of a blended alternative.

Comment	Response
12	The FAA disagrees with the basis for the comment that the "FAA Produces Erroneous Claims of Delay Savings." As stated in response to comment 9, FAA disagrees with the commenter regarding the use of the base case. With regard to the level of delay associated with a higher level of activity, the FAA notes that it is not unaware that this would result in a higher level of annual average delay. This possibility of a higher level of activity serves to bolster the need for improvements as included in the selected alternative. With regard to the "taxi time penalty," the FAA refers the commenter to response to comment 6 of this document.

Moreover, several of these blended alternatives have delay values equal to or better than full build OMP-Master Plan (as posited by FAA without demand management). See Table below.

Alternative	Level of delay per operation
Full build OMP-Master Plan in 2023 at 15 minutes AAAW delay plus 6.5 minutes taxi delay — without demand management	21.5 minutes
Derivative H – No Action with Use of Other Airports and Congestion Management (Average Annual Delay of 9.3 Minutes per Operation)	9.3 minutes
Derivative I – No Action with Use of Other Airports and Congestion Management (Average Annual Delay consistent with NPRM Modeled Delay)	**[unknown]** FAA has not run TAAMs model on FAA Scheduled Order delays
Derivative J - No Action with Use of Other Airports and Congestion Management (Average Annual Delay 4, 6, 8 Minutes per Operation or other FAA Level)	4, 6, or 8 minutes as selected by FAA

Nor does FAA's constant refrain that it has no legal power to "directly" "compel" airlines to use other hubs provide cover for FAA's blind refusal to consider and employ blended alternatives. No one is asking FAA to "order" the airlines to use other airports. But reality shows that FAA under its existing grant and regulatory authority has approved or implemented numerous blended airport alternatives throughout the country. FAA cannot continue to ignore such examples

as: 1) the 1984 decision by Chicago and FAA to use a blended alternative at O'Hare (See 1983 DEIS and 1984 ROD) to accommodate less than all of the "unconstrained demand" at O'Hare while using other airports to carry the excess demand; 2) the existing blended alternative in place now at O'Hare, LaGuardia, and Reagan National, 3) the selection of a physical blended alternative at LAX, and 4) the imposition through grant requirements of demand management (*i.e.*, blended alternative) in conjunction with use of regional airports for Boston Logan. Each of these actions has had or will have the necessary consequence of causing the airlines using O'Hare, LGA, Logan, Reagan National and LAX to shift some of their flights to other airports.

FAA's rejection of various viable alternatives is without merit and unsupported by facts or logic. As noted above, Alternatives H, I, and J use the existing airport and are by definition safe. As to Alternatives M, N, and the C1-C5 Derivatives,. a detailed rebuttal of the FAA's alternative analysis is set forth in the affidavit of Kenneth Fleming, a renowned aviation airspace/air traffic expert with Embry Riddle University, attached hereto. Mr. Fleming conclusively demonstrates that FAA's rejection of alternatives, including alternatives that would avoid the destruction of the cemeteries, cannot be sustained.

13

XI. The FEIS Does Not Comply With Clean Air Act Conformity Requirements.

The Final General Conformity Determination included in FEIS Appendix J, and discussed at subsection 5.6.4, remains inadequate for

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Comment	Response
13	The FAA included a detailed examination of blended alternatives, along with the use of congestion management, is discussed in the Final EIS at Chapter 3 and in this ROD at Section 6. Further, the FAA rejects the commenter's assertion that O'Hare delay will reach some 21.5 minutes at ten years beyond the full build out of the OMP. Delay projections do not include unimpeded taxi time as was improperly included in the commenter's table at page 20 of its submission, see response to comment 6. Contrary to the commenter's assertion, the FAA does not believe that its action in this matter is in any way inconsistent with how it has treated proposed improvement projects at other airports or earlier in the history of O'Hare. The 1984 decision of the FAA identified by the commenter expressly approved an improvement project for that planning horizon which reflected both the goals of the City of Chicago and its airport master plan then in effect. In essence, the FAA approved 1984 O'Hare planned improvements, limited as they were, with the same degree of deference to the sponsor that it exhibited in approving the recent proposals for improvements at LAX and Boston Logan. The FAA's consideration of proposed improvements or techniques to address delays at those airports where airport capacity improvements are practically infeasible, such as LaGuardia, Washington-National, and Midway, will be substantially different from situations where the airport sponsor has the capacity and interest in improving its facility and contributing to overall enhancement of the National Airspace System. The commenter's reliance upon our recent decisions approving improvements at LAX and Boston Logan as evidence that we have approved or implemented blended airport alternatives is misplaced. The alternative selected by the FAA for approval in the LAX ROD did not include either congestion management or use of other airports. The FAA's ROD approving Runway 14/32 at Boston Logan did not independently impose demand management through grant requirements, but rather referred to the requirement that the State in certifying approval of the project under the Massachusetts Environmental Policy Act imposed upon the Massachusetts Port Authority to implement demand management. The FAA's ROD for Boston Logan also established a timeline for fulfilling this commitment by directing Massport to develop and submit a detailed plan or draft proposal for peak period pricing, or other comparable demand management program, before commencing construction of Runway 14/32. The alternative that the FAA selected in the LAX ROD did not include congestion management or use of other airports although the airport sponsor hopes that physical constraints will encourage airlines to shift service to other regional airports. The FAA has responded to the Fleming affidavit separately beginning on page A.2-170 of this appendix.

the reasons set forth in detail in the Community and Religious Objectors' Comments on and Objections to the Draft General Conformity Determination for the O'Hare Modernization Program, submitted on June 20, 2005, and supplemented on June 24, 2005.

The FAA has yet to demonstrate that construction-related emissions from the project conform to the Illinois Clean Air Act State Implementation Plan ("SIP"). Under the applicable conformity regulations, 40 C.F.R. § 93.158(a)(5)(i)(A), where the SIP does not specifically account for project-related emissions, the Illinois Environmental Protection Agency ("IEPA") must determine and document that those emissions for which there is no SIP accounting—along with all other emissions in the local air quality control region—will not exceed the applicable overall SIP budget for emissions of that pollutant. IEPA has not documented such a determination. Instead, in a letter dated July 13, 2005, IEPA simply states: "Although this SIP did not explicitly include additional VOC and NOx emissions to account for the O'Hare Modernization Program, sufficient emissions were incorporated into both the Attainment Demonstration modeling and the Rate-of-Progress emissions projection to accommodate the emissions projected to result from the O'Hare Modernization Project." This generic statement—without any documentation—is an incomplete finding of conformity. Without a complete conformity finding, the Clean Air Act bars the FAA from supporting the project.

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Comment	Response
14	The FAA disagrees that the Final General Conformity Determination is inadequate for any of the reasons set forth in the Community and Religious Objectors' Comments on and Objections to the Draft General Conformity Determination for the O'Hare Modernization Program, submitted on June 20, 2005, and supplemented on June 24, 2005. Under the applicable conformity regulations, several acceptable approaches are set forth. In consultation with both IEPA and USEPA, FAA implemented one such acceptable conformity demonstration approach as shown in the Final EIS and its associated General Conformity Determination for O'Hare Modernization. As noted in the Appendix J of the Final EIS, USEPA recognized that emissions associated with airport-related development are not typically specifically identified or accounted for in SIPS. Joint guidance from USEPA and FAA (*General Conformity Guidance for Airports Questions and Answers 17, 21 and 22, September 25, 2002*) states that if the airport emissions are not readily identifiable in a SIP inventory, that the State should be consulted to determine what, if any, portion of a category could or would be allocated to an airport. Such a determination is done on a case-by-case basis with input from the State/local air quality agency and the USEPA regional office. As stated in the IEPA's letter "The Illinois IEPA worked with the FAA in the preparation of the General Conformity Determination, providing information on the level of VOC and NOx emissions incorporated into the SIP for O'Hare aircraft, aircraft refueling, and ground service equipment operations, as well as regional construction equipment and motor vehicle emissions. Comparing the level of emissions projected for the construction and operation of the O'Hare Modernization Program in the General Conformity Determination for the necessary analysis requirements, the Illinois EPA concurs that such emissions are accounted for within the 1-hour Attainment Demonstration SIP for the Chicago region." FAA made its conformity determination based on consultation with the appropriate state and federal agencies; therefore, no further documentation is required.

XII. The FEIS Does Not Take Into Account Indirect Air Quality Impacts of the Proposed Project.

For the reasons discussed in the Community and Religious Objectors' Comments on and Objections to the Draft Environmental Impact Statement for the O'Hare Modernization Program, dated April 6, 2005, the FEIS similarly fails to take into account the indirect air quality impacts of the project. The FEIS does not specifically analyze the impact of indirect emissions—for example, increased off-site power generation—caused by the project. Under FAA Order 1050.1E, Appendix A, § 2.1o, the FAA must analyze the impact of these emissions. Instead, in its response to comments, the FAA simply concludes that IEPA has included projections of future power production in its SIP analyses, that the FAA generally (and in an unspecified way) relies on the generic SIP projections, and that there is therefore no need to specifically analyze indirect emissions impacts. Until the FAA performs the required indirect emissions impact analysis (as it did for the LAX expansion), its NEPA obligations are incomplete.

15

XIII. FAA fails to perform a quantitative health risk analysis on the heath risk of Hazardous Air Pollutants on surrounding communities.

FAA has ignored our request to perform a quantitative health risk assessment of the impact of increased hazardous air pollutants on surrounding communities on the ground of feasibility. Yet such studies have been performed — in some instances at the direction of the courts— in California and in the New England States. Emission

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Comment	Response
15	The FAA respectfully disagrees with the commenter's assertion that indirect emissions were not assessed in the EIS. The FAA's Final EIS properly relied upon the estimated increase in emissions from electrical production in the 1 hour Ozone Attainment Demonstration State Implementation Plan to account for the anticipated increase in emissions by the power plant at O'Hare that would be attributable to the proposed improvements. It was not necessary to quantitatively estimate these indirect emissions where, as here, as here, the IEPA supported the FAA's determination that the projects conforms because project-related emissions are accounted for in the SIP within the meaning of 40 C.F.R. 93.158(a)(5)(i)(A). As the FAA determined that a general conformity evaluation and determination were required for these pollutants, the provisions in FAA Order 1050.1E Appendix A, paragraph 2.1o, cited by the commenter, are inapplicable. These provisions apply in determining whether emission threshold levels are exceeded so that a conformity evaluation is required. The commentor's reliance upon the LAX Final EIS is misplaced. The commenter is correct that the potential increase in indirect emissions that would be caused by electrical generation associated with the proposed LAX improvements were quantified as part of that EIS. However, the projected increase in indirect emissions attributable to power plants was so small that these emissions were not considered in analyzing potential air quality impacts in the Final EIS for LAX. Specifically, as stated in Appendix U of Final EIS (page U.4-473) in response to this comment, the air quality analysis assumed that there would be an increase in emissions associated with the power plant at O'Hare with the proposed improvements. In addition, the IEPA accounts for the growth in emissions from the commenter's identified indirect source, electrical production, within the non-attainment area in their State Implementation Plans (SIPs). As a result of this air quality analysis, NEPA's command to identify indirect impacts (here, air quality) has been satisfied. By virtue of the inclusion of these indirect impacts in the SIP, NEPA's duty to identify the environmental consequences of such impacts has also been fulfilled.

inventories for major airports such as O'Hare have been acknowledged to represent some of the largest— if not the largest sources of toxic and hazardous air pollutants in most states. There is no reason why FAA should exempt O'Hare from such an analysis.

The surrounding communities have a right to know the base-line and incremental toxic health hazards that O'Hare's operation and its proposed expansion impose on our communities. 16

XIV. FAA's 4(f)/6(f) Evaluation Improperly Dismisses Prudent and Feasible Alternatives.

The Final Section 4(f)/6(f) Evaluation included in Appendix L of the FEIS, and summarized in Section 5.8 is inadequate. For the reasons set forth in detail above and in our earlier comments on Chapter 3, Alternatives, the FAA's conclusion that there are no prudent and feasible alternatives to using the 4(f)/6(f) resources is not supported by the facts as required by 49 U.S.C. § 303(c)(1).

Similarly, the FAA's legal interpretation of Section 4(f) is untenable. The FAA identified no fewer than 15 feasible alternatives in the FEIS that would avoid destruction of 4(f)/6(f) resources, but dismissed some of the most promising of these alternatives because in the FAA's view, the alternative would not perform "as well as Alternative C." See FEIS, Section 5.8.5, and Appendix L, Section L.3.2. This interpretation of "prudent" completely disregards the preservation and conservation benefits of the less destructive alternatives, and is fundamentally inconsistent with the FAA's responsibilities under 49 U.S.C. § 303(c)(1). 17

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Comment	Response
16	The FAA directs the commenter to Section 9.3 of the ROD regarding HAP issues.
17	FAA respectfully disagrees with the commenters' assertions that the FAA's analysis does not meet the requirements of 49 U.S.C. 303 (c)(1). FAA further disagrees with the commenters' statement that "FAA's legal interpretation of Section 4(f) is untenable." FAA's evaluation of alternatives as presented in Chapter 3 of the Final EIS makes it clear which alternatives can satisfy the purpose and need. Based on comments previously submitted on the Draft EIS and on the Draft Section 4(f)/6(f) Evaluation, FAA conducted a thorough analysis of derivatives as presented in Section 3.6 of the Final EIS. In addition, FAA has thoroughly considered and responded to additional comments on the Final EIS in this ROD (e.g. Fleming affidavit, Campbell affidavit). Based upon all the information developed and reviewed by FAA, including the comments received on the Section 4(f)/6(f) process, the FAA believes that this ROD satisfies the requirements of Section 4(f)/6(f).

XV. Failure to Include All Possible Planning To Minimize Harm to 4(f)/6(f) Resources.

Publication of the Final 4(f)/6(f) Evaluation in the FEIS clearly demonstrates that the FAA has failed to include "all possible planning to minimize harm to . . . historic site[s]" as required by Section 4(f)/6(f). 49 U.S.C. § 303(c)(2). The FAA had not completed the Section 106 process at the time it published the Final 4(f)/6(f) Evaluation in the FEIS. Rather, the FEIS indicates that the FAA will complete the Section 106 process some time after the FEIS publication. One of the core purposes of Section 106 of the National Historic Preservation Act is to establish a planning process specifically designed to minimize harm to historic resources, a subcategory of 4(f)/6(f) resource. The failure to complete this planning process before completing the 4(f)/6(f) evaluation violates 49 U.S.C. § 303(c)(2). 18

XVI. FAA's Abject Failure to Meet Its Responsibilities Under the First Amendment and the Federal Religious Freedom Restoration Act.

After waiting three years without answer for a response to our repeated entreaties that FAA protect the religious cemeteries' religious rights and that FAA not violate the religious cemeteries' religious rights through ALP approval and funding of Phase One and the full build OMP-Master Plan, FAA finally responded on July 28th by proposing an alternative that will destroy St. Johannes Cemetery and rejecting a host of alternatives that would avoid the destruction of the

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Comment	Response
18	The FAA respectfully disagrees. Numerous opportunities for comments on Section 106 and Section 4(f)/6(f) resources were afforded, and numerous comments were received. The FAA has completed the consultation process under Section 106 with the signing of the MOA by the Advisory Council on Historic Preservation, State Historical Preservation Office, FAA, and City of Chicago. Despite the fact that the Section 106 consultation process was concluded after the Final Section 4(f)/6(f) Evaluation, the FAA fully satisfied the requirements of these statutes. With respect to historic preservation concerns, the FAA identified the properties that might be potentially affected in the Draft EIS and included early concepts for potential mitigation in the Draft Section 4(f)/6(f) Evaluation. It is clear from both the text of the Draft EIS and Draft Section 4(f)/6(f) Evaluation, the public comments thereon, and the Final EIS that there has been a vigorous discussion and analysis of Section 4(f)/6(f) and Section 106 resources. Although there are occasions when the NEPA/EIS and Section 4(f)/6(f) and Section 106 proceed simultaneously, there is no requirement in any of those statutes that simultaneous consideration is the only acceptable means of satisfying these several requirements. Here, the FAA urged the inclusion of several potentially eligible properties in order to afford them the formal protections of Section 106. Had the FAA been less proactive in seeking to expand the scope of the duties under this Act it might have concluded these processes earlier. In any event, the Agency believes it has fully satisfied all applicable requirements. Indeed, in an August 30, 2005 consultation meeting with the SHPO, FAA, the City of Chicago, and Consulting Parties (Village of Bensenville, Elk Grove Village, St. John's Church of Christ, and the Rest Haven Cemetery Association), the Director of Federal Programs of the Advisory Council, recognized that there are circumstances when adverse effects on protected properties cannot be avoided. In those cases, the Director recognized that the appropriate step is to minimize if possible and then mitigate those adverse effects. The Director reminded those in attendance at the meeting of the limited scope of the Section 106 consultation process. This includes taking into account effects to historic properties and affording the Council an opportunity to comment. Adoption of a Memorandum of Agreement signifies completion of the process and compliance with the statute (see transcript of consultation meeting for resolution of adverse effects 8/30/2005 pages 128-131). The Section 4(f) and Section 106 processes have been completed with the signing of the MOA and issuance of this ROD.

cemetery. For the reasons stated in our earlier communications (incorporated herein) we believe that FAA is violating the federal Religious Freedom Restoration Act and is a co-participant (through ALP approval, and FAA AIP and PFC decision-making) with Chicago in violating the cemeteries' First Amendment right to the Free Exercise of Religion. For the reasons set forth previously and above:

A. Chicago has singled out these two religious institutions for discriminatory treatment in stripping the protection of the Illinois Religious Freedom Restoration Act from these two religious institutions while preserving the protection of that Act for all other religious institutions in the State of Illinois.

B. FAA is complicit in Chicago's First Amendment violation by proposing to approve the OMP with the foreseeable and known consequence of which is the destruction of St. Johannes Cemetery.

C. FAA's proposal to isolate Rest Haven behind blast walls in a sea of concrete in the middle of a high jet traffic cargo area continues to cause unacceptable injury and a substantial burden on the religious beliefs and practices of the Rest Haven Religious Objectors.

D. FAA has now acknowledged that FAA's and Chicago's actions in destroying St. Johannes Cemetery impose a "substantial burden" on the exercise of the cemetery's religious practices and beliefs within the meaning of the First Amendment and the federal RFRA.

E. FAA has not made the required factual demonstration to an independent judicial tribunal that there is a compelling governmental need for the full build OMP-Master Plan (or Phase 1) as opposed to an alternative which would avoid the destruction.

F. FAA has not made the required factual demonstration to an independent judicial tribunal that there are no alternatives available to meet a purported governmental need which would avoid the injury.

G. Religious Objectors submit that FAA has not been given — or could be given within the mandate of Article III of the Constitution — the judicial authority to make the adjudicative determinations of the application of the First Amendment and RFRA requirements to the contested facts in this matter.

H. Assuming *arguendo* that federal courts determine that FAA has the judicial authority to make the adjudicative determinations of the application of the First Amendment and RFRA requirements to the contested facts in this matter, the adjudicative procedures used by FAA in this matter have violated basic principles of Due Process and the requirements of the Administrative Procedure Act. FAA has hidden evidence, engaged in improper ex parte communication, and used officials and contractors who should have disclosed their past relationships with Chicago and who should have been disqualified from any

participation in any adjudicative decision-making processes by FAA. 19

For the foregoing reasons, the FAA's FEIS is legally defective and the FAA may not approve the OMP or permit the OMP project to go forward. 20

Respectfully submitted,

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Comment	Response
19	The Final EIS at Section 5.22 presented the FAA's proposed findings with respect to issues arising under the First Amendment and RFRA. The Agency invited public comment on those tentative findings. After careful consideration of those comments, the FAA has made its final determinations under these measures in of Section 12 of this ROD. These determinations are fully responsive to the comments presented here.
20	The FAA respectfully disagrees with the commenter's assertion that the Final EIS is legally defective. The FAA has carefully considered the comments provided and does not find the arguments raised by the commenter persuasive as outlined throughout the FAA's responses.

Comment	Response
Attachment 1 to Karaganis-Cohn	The FAA's response to Mr. Le's affidavit appears immediately following the last page of the affidavit.

050906_04

AFFIDAVIT

Tung Xuan Le , being first duly sworn on oath, deposes and says:

1. I am President of LeTech Inc., a computer technology consulting firm in Alexandria, Virginia.

2. Bachelor of Science in Mechanical Engineering, minor in Computer Science, 1983, Catholic University of America, Washington, DC.

3. For the past sixteen years. I have worked as a professional computer scientist in airport computer simulation. In that time I have performed numerous simulation analyses for airspace, runway, gates, and terminal worldwide. Additionally, I am the developer of TotalAirportSim and was a member of the FAA's SIMMOD development team. I am very familiar with the structure of airport capacity and delay simulation models.

4. I have conducted a preliminary review of the TAAM simulation model runs and data used by the FAA in the Final Environmental Impact Statement for the project called the "O'Hare Modernization Program" ("OMP")..

5. FAA used as input to the program the year 2002 Terminal Area Forecast (TAF) and I was asked to give a professional expert opinion as to the length of time that would be necessary to re-run the TAAM program with either 2003 or 2004 TAF data as the inputs.

6. My opinion as to the length of time required for such an effort and the basis for my opinion is as follows:

   A. In performing an airport analysis using an airport/runway simulation model, there are two major parts for development, 1) building the network and 2) building the input schedule.

   B. In comparison of these two major parts mentioned above, the less complex part to build is the input schedule for a full airport simulation analysis.

C. Assuming that a series of experiment with the 2003 or 2004 TAFs all uses exactly the same network, the only effort is to build a different input schedule for each experiment.

D. In any one experiment (*e.g.*, the use of the 2003 or the 2004 TAF), the effort to translate a new schedule to be useable with the network, should not take more than 20 business days and as little as 1 week in some cases , with the following assumptions:

1) The same analyst or someone comparable in expertise, in the tool and understanding of the dataset, performs the experiment.

2) The new schedule does not require any modification to the network.

3). The new schedule, 2003 or 2004, is derived from the 2002 schedule using cloning method, duplication and/or modification method or some other agreed upon method.

4). The same new schedule is used for all other experiments.

7. If any additional variations or modifications were necessary, the work could till be done in the time frame I discussed if sufficient financial and manpower resources were assigned to the task.

Signature _____

Signature Date: Sept 6, 2005

Sworn before me on this 6 day of September, 2005 (Date).

_____
Notary Public

05/31/2006
My Commission Expires

FAA Response to Le Affidavit:

The FAA disagrees with the estimate of time required to conduct a thorough and complete modeling evaluation for the purposes of the Environmental Impact Statement (EIS). The commenter's time estimate largely deals with the actual time to run the model and not the additional work necessary to validate and interpret the results for their subsequent use. In the estimating the amount of time necessary to conduct the entire modeling and evaluation assignment, as performed by FAA, the commenter has neglected the following factors:

- the work involved in the modification of the derivative flight schedules currently based on the 2002 TAF to incorporate accurately the levels of activity associated with the 2003 or 2004 TAFs;
- the balancing of airfield and the gating of the modified flight schedules;
- coordination among the parties involved including the modelers, FAA reviewers, and most importantly the air traffic controllers;
- the time to conduct an iteration following the review by FAA, its contractor, and the air traffic controllers;
- the time associated with gaining FAA, including air traffic controller, concurrence with the simulation following the first iteration;
- the time associated with developing the substantial documentation and outputs from the TAAM modeling for use in the inputs to the noise and air quality modeling necessary for a complete environmental evaluation;

The FAA also notes that to generate reliable accurate results each alternative modeled would be subject to a number of experiments. For example, the full build out of Alternative C was modeled under both east and west flow under a variety of weather conditions requiring 6 experiments alone for a given level of activity.

The commenter mentions the assumption that the same schedule be used for all experiments, and the FAA notes that this could not yield a demand delay curve. To build a credible demand delay curve, each experiment would, by necessity, require the running of at least three different schedules. In other words, the 2003 TAF would need at least three schedules developed for three different levels of activity, such as 2009, 2013, and 2018.

In addition, each experiment involves the time-intensive task of building appropriate rules within the experiment to dictate the taxiway routes and numerous other operational restrictions that are unique to a given alternative.

As stated in the response to Karaganis-Cohn's September 6, 2005 comments on the Final EIS, the FAA's rationale for declining to model the 2003 TAF is not based upon an evaluation of the time it would take. The FAA does not need to rerun models to make professional analytical judgments regarding the effects of an alternative level of activity within a reasonable range such as the 2003 TAF. The FAA has held consistently that as more recent TAFs were made available the FAA would reexamine the appropriateness of the use of the 2002 TAF. Appendix R of the Final EIS is an example of the work conducted in such an examination. The FAA believes that the use of the 2003 or 2004 TAFs would not alter the conclusions reached in the Final EIS or the approval of Alternative C in this ROD.

Comment	Response
Attachment 2 to Karaganis-Cohn	The FAA's response to Dr. Campbell's affidavit appears immediately following the last page of the affidavit.

AFFIDAVIT OF BRIAN M. CAMPBELL

Brian M. Campbell, being first duly sworn on oath, deposes and says:

1. I serve as Chairman of the Campbell-Hill Aviation Group, Inc, an aviation and economic research and consulting firm located at 700 North Fairfax Street, Alexandria, Virginia.

2. I have a Ph.D. degree from Columbia University in Business Administration (1969).

3. Since 1968 I have served in a variety of roles in the aviation industry, including service as a senior airline executive and several decades of experience as a consultant to airlines, airports, state governments, and the agencies of the federal government (FAA and DOT). My training, experience, and expertise is in airline economics, aviation planning and forecasting, the measurement of the economic impacts of air services on local and regional economies, and the economic analysis of aviation issues. This includes financial, marketing, planning, and operations aspects of airlines, airports, and equipment manufacturers. A detailed description of my and my firm's (Campbell-Hill Aviation Group, Inc.) expertise, experience and representative clients is included as Exhibit A to this affidavit.

4. I and my firm have been asked by the Villages of Bensenville and Elk Grove Village to conduct an analysis and evaluation of the City of Chicago's proposed construction of modifications to O'Hare Airport, including analysis of the Draft (DEIS) and Final (FEIS) Environmental Impact Statements prepared by the FAA for Chicago's proposed construction at O'Hare and including the City of Chicago's pending request from FAA for a 300 million dollar discretionary Airport Improvement Program ("AIP") grant for Phase One of the project, and a request for over one billion dollars in federal Passenger Facility Charge (PFC) authorization for Phase One.

5. Because components of Chicago's proposed construction of modifications to O'Hare Airport have been given different names — e.g., "World

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Gateway Program" ("WGP"); "O'Hare Modernization Program" ("OMP"); and "Capital Improvement Program" ("CIP") — I will refer to Chicago's proposed construction of modifications to O'Hare Airport as the "full build OMP-Master Plan" which is described in a Master Plan funded by the FAA, prepared by the City of Chicago and published in February 2004. This full build OMP-Master Plan proposal has been selected by FAA in the Final Environmental Impact Statement (FEIS) as "Alternative C". The initial component of Alternative C is called "Phase One".

6. My firm's analysis of these materials prepared and released by Chicago and the FAA is contained in four documents: a) *A Critical Assessment Of The Draft Environmental Impact Statement For The O'Hare Modernization Program (OMP)*(April 6, 2005); *Chicago's O'Hare Modernization Program Fails To Meet The FAA Tests For Benefit-Cost Justification* (June 6, 2005); *Comments In Regard To: The Federal Aviation Administration's Draft Section 4(f) And Section 6(f) Evaluation For Chicago O'Hare International Airport* (July 5, 2005) and *Presentation to The Federal Aviation Administration In Regard to The City of Chicago Benefit-Cost Analysis In Support of Its Proposed O'Hare Modernization Program* (July 21, 2005).

7. As set forth in Chicago's Master Plan and the FAA's Final EIS, Chicago's proposed modifications will have a highly destructive impact on homes, businesses, and parklands in the communities of Bensenville and Elk Grove Village and on at least one religious cemetery adjacent to O'Hare. Under the Chicago proposal, as now proposed for approval and funding by the FAA, Chicago intends to acquire and destroy homes, businesses and parkland in Bensenville and businesses and parkland in Elk Grove Village, including what Bensenville has advised me is the largest supply of affordable housing in all of DuPage County, Illinois. Under the Chicago proposal, as now proposed for approval and funding by the FAA, Chicago will acquire and destroy the St. Johannes Religious Cemetery. Based on the design and construction schedule put forward by Chicago all of the acquisition and destruction of the homes, businesses,

park lands in Bensenville and Elk Grove and the destruction of St. Johannes Cemetery will occur in Phase One.

I. **The Scope of My Analysis and Affidavit**

8. I have been asked by Bensenville and Elk Grove Village to conduct an investigation and analysis of the proposed Chicago modifications of O'Hare — both as to the full build OMP-Master Plan and the initial phase of the project known as "Phase One" and to make findings on a variety of issues, including:

A. **Financial Feasibility.** FAA has stated that a necessary element of any alternative selected by FAA to meet the goals set by FAA is that it be feasible. The DOT Inspector General has stated in a recent report that FAA is mandated by federal statute to confirm that there are assured financial resources for both the full build OMP-Master Plan as well as Phase One before issuing any AIP grants or PFC awards for Phase One.

(1) For the reasons I set forth below, I conclude that the full build OMP-Master Plan is not financially feasible and that neither Chicago, nor the FAA, nor the airlines have or can obtain the financial resources needed to build the full build OMP-Master Plan. Therefore, it is virtually certain that all Chicago can build with realistically available resources is some smaller component of the full build OMP-Master Plan. This finding has major implications for the FAA's identification of facilities needed to meet the aviation needs of the Chicago region (a major stated purpose of the FAA) and for the selection of alternatives to meet those needs as well as the FAA's asserted reasons for rejecting certain alternatives.

(2) For the reasons set forth below, I conclude that — based on the available evidence — Chicago cannot finance the completion of Phase One of the full build OMP-Master Plan. This finding also has major implications for Chicago, the FAA and the impacted communities. FAA proposes to allow

Chicago to acquire and bulldoze the homes, businesses and parklands in Bensenville and Elk Grove Village and the destruction of St. Johannes Cemetery before FAA makes federal funding decisions on approximately $1.4 billion dollars of the 3 billion dollars Chicago says it needs for Phase One. The available facts discussed below demonstrate that FAA is prohibited from awarding or authorizing these funds. Therefore, FAA is proposing to allow Chicago to bulldoze and destroy these resources (and cause millions of dollars of economic losses to these communities) with the virtual certainty that the money will not be available to complete Phase One and that some other alternative will need to be pursued — an alternative which need not involve the destruction of these resources.

B. **Alternatives.** Are there feasible alternatives which would avoid the destruction of the homes, businesses, parklands in Bensenville and Elk Grove and the destruction of St. Johannes Cemetery? For the reasons discussed below, I conclude that there are a variety of feasible alternatives which can meet aviation demand growth and control delays to acceptable levels — without destroying the homes, businesses, and parklands in the Bensenville and Elk Grove Village and without destroying St. Johannes Religious Cemetery.

C. **The credibility and associated logic and evidentiary support for FAA's assertions in the FEIS.** Do the reasons provided by FAA in the FEIS for proposing to approve Chicago's proposal for the full build OMP-Master Plan — and for rejecting alternatives which would avoid the destruction of the homes, businesses, and parklands in the Bensenville and Elk Grove Village and the destruction of St. Johannes Religious Cemetery — find support in evidence and logic? Based on the facts and analysis set forth below, I find that the reasons provided by the FAA in the FEIS as justification for FAA's proposed action are neither supported by evidence or logic. Many of the major reasons asserted by

FAA to justify its proposed actions are 1) unsupported claims devoid of any evidentiary or factual support; 2) "non sequiturs" — *i.e.,* statements or assertions that do not follow logically from the asserted premise on which they are based; 3) *ipse dixit* assertions — *i.e.,* assertions put forward as true and accurate simply because FAA says it is so, and 4) statements supported only by sweeping claims of "expertise" without any evidence and reasoning to support the claim.

II Summary of Findings and Conclusions.

9. Based on the analysis and evidence set forth below, the following is a summary of my findings and conclusions:

A. Construction of the full build OMP-Master Plan is not financially feasible. There are insufficient funds for Chicago to build the full build OMP-Master Plan.

B. Based on the available evidence, there are insufficient funds for Chicago to build Phase One.

C. As emphasized by the DOT Inspector General in his July 2005 report, FAA should not fund Phase One without assurance that the funds are available and secure to build the remainder of the full build OMP-Master Plan.

D. FAA is faced with the situation of wanting to approve a project which federal law prohibits FAA from funding because the project violates statutory mandates. Because of these funding prohibitions (the full build OMP-Master Plan fails several statutory tests), full build OMP-Master Plan will most likely never be constructed. Moreover, because the same statutory funding prohibitions also prohibit the funding of Phase One, FAA's announced intent to allow Chicago to go forward with the destruction of homes, businesses, and park lands in Bensenville and Elk Grove Village before FAA makes its determination as to funding decisions will likely lead to an unfinished Phase One with enormous damage to the surrounding communities and the religious cemetery.

E. FAA intends to allow the destruction of homes, businesses, and park lands in Bensenville and Elk Grove Village before FAA makes its determination as to funding decisions for AIP and PFC federal funds for either Phase One or full build OMP-Master Plan. It is my opinion that allowing such destruction before FAA makes it funding decisions is arbitrary and irrational. For the reasons set forth in this affidavit, it is extremely unlikely that FAA can approve the requested federal AIP and PFC funding for either Phase One or the full build OMP-Master Plan. It is my understanding that when making these funding decisions, FAA is under a legal mandate to consider protecting these resources under a variety of federal environmental and religious protection laws. If FAA allows destruction of these resources to proceed before its funding decisions are made, there will be no resources for FAA to protect when it makes its funding decisions.

F. The alternative proposed by FAA as the preferred alternative –Alternative C (the full build OMP-Master Plan) will neither meet unconstrained demand nor reduce delays over a proper time period of analysis. Based on the 2004 Terminal Area Forecast, the capacity of the full build OMP-Master Plan will be exhausted no later than 2023, and likely sooner. Similarly any asserted delay benefits for full build OMP-Master Plan will be exhausted by 2019. Use of either the 2003 or 2004 TAF show that the capacity of the full build OMP-Master Plan will be exhausted either at the time it opens (depending on what level of delay is deemed acceptable as a measure of capacity) or within a few years after it opens — leading to the necessity for FAA to employ blended alternatives of congestion management and use of other airports to accommodate the so-called "unconstrained" demand even with full build OMP-Master Plan.

G. There are several alternatives which will allow the servicing of forecast aviation demand and controlling delay while avoiding the destruction of the homes, businesses, and parklands in the Bensenville and Elk Grove Village and the destruction of St. Johannes Religious Cemetery.

H. FAA's rationalizations and justifications for the positions it has taken on several of the issues relating to its proposed approval and eventual funding of full build OMP-Master Plan and Phase One suffer from a profound absence of evidence, logic, and objective analysis.

III. The full build OMP-Master Plan Is Not Financially Feasible

10. In conducting my basic analysis of the financial feasibility of the full build OMP-Master Plan, I have accepted (for purposes of the this analysis only) the cost estimate provided by FAA in the FEIS at page 1-54 (Table 1-11) and the funding sources listed by FAA at page 1-55 (Table 1-12). For the reasons stated below, I believe that the cost estimate provided by FAA understates the true cost of the full build OMP-Master Plan, but in order to minimize areas of dispute I have directed my analysis of financial feasibility to the cost estimate of 14.29 billion dollars provided by FAA at page 1-54.

11. Based on the percentages of the sources of funding provided in Table 1-13 of the FEIS, the amounts of money Chicago must raise to pay for full build OMP-Master Plan and the sources of those funds are as shown in Table One of this Affidavit:

TABLE ONE

Project Element	FAA-Chicago cost	AIP entitlement	AIP discretionary	PFC pay as go	PFC Bonds	GARBS	Third Party or Special Facility Financing
OMP	$7,087,000,000	$70,870,000	$566,960,000	$141,740,000	$1,417,400,000	$4,181,330,000	$708,700,000
WGP	$2,977,000,000					$2,322,060,000	$654,940,000
CIP	$4,128,000,000		$247,680,000	$454,080,000	$1,238,400,000	$2,229,120,000	
Total	**$14,192,000,000**		**$814,640,000**	**$595,820,000**	**$2,655,800,000**	**$8,732,510,000**	**$1,363,640,000**

Source: Tables 15 and 16 FAA DEIS, Executive Summary- individual cost amounts based on percentages presented in Table 16—amounts do not reconcile due to rounding

12. The significance and need for a realistic assessment by FAA of Chicago's ability to raise the massive amount of funds identified by FAA as needed to finance the $14.29 billion cost estimate by FAA has been underscored by the DOT Inspector General in his July 2005 report entitled *Chicago's O'Hare Modernization Program* (Report Number Av-2005-067) in which the Inspector General states:

> "The City is projecting that approximately one-third of the OMP will be funded with FAA-approved PFCs and FAA-issued AIP grant funds. FAA will need to verify that the OMP's costs, schedule, and sources of funding are realistic, reasonable, and credible and that any known risks that could affect the cost and schedule of the OMP are fully disclosed and considered."
>
> IG report at 11-12 (emphasis added)

The Inspector General said further:

> "Given the amount of taxpayer dollars at stake in the OMP, it is essential that FAA fulfill its statutory mandate to ensure, among other things, that the use of the PFC revenues is adequately justified. The Department has a **statutory mandate** to ensure that sufficient funding exists to complete a project before committing AIP discretionary funds to that project. Fulfilling these mandates will require FAA to proactively and aggressively analyze the reasonableness and validity of the OMP financial plan. We are making this point because FAA has the legal obligation to assure that the project costs not paid for with AIP grants or PFC revenue will in fact be covered by non-Federal funds (such as airport-issued bonds) before approving the LOI for Phase 1.
>
> Id at 12 (emphasis in bold and underscore added)

13. The Inspector General's July 2005 report states that the FAA had in its possession the text of the draft IG report since April of 2005 yet the July 2005 FEIS contains absolutely no evidence to indicate that FAA has addressed the concerns raised by the Inspector General.

14. I and my firm have conducted a financial analysis of the $14.29 billion dollar cost estimate used by FAA in the FEIS and the likelihood that the huge amounts of money indicated in the above Table will be available. For the following reasons, I conclude that the assumed financing for the project — both as to the assumed sources of the funding and the total needed amount of the funding— will not materialize.

15. **The more than 800 million** dollars **in AIP "discretionary" funds listed in Table One above will not be available.** The federal AIP statute prohibits FAA from awarding AIP "discretionary" funds unless the project benefits exceed the costs. Chicago has submitted to FAA a Benefit-Cost analysis claiming that the benefits of the full OMP exceed the costs of the full OMP and that the full OMP has a benefit-cost ration of $1.04 worth of benefits for every $1.00 of cost — *i.e.*, a benefit-cost ration of 1.04.

16. An examination of the Chicago benefit-cost analysis (used to produce that benefit-cost comparison of 1.04) discloses that Chicago ignored the very FAA demand

forecast and the very FAA capacity and delay modeling results used by FAA in the FEIS and by Chicago in its Benefit-Cost Analysis . In order to push asserted economic benefits above the huge costs of the full OMP, Chicago assumed that traffic under the full OMP would stay constant at 974,000 operations for the next 20 years after the project opened (2013 to 2032) and that the delay differential between the full build OMP and the existing airport (*i.e.*, the asserted minutes of delay savings claimed by Chicago) that Chicago and the FAA predicted for the year 2013 would stay the same for the entire period 2013-2032.

17. These assumptions (constant traffic level at 974,000 operations and constant delay differential — both for the period 2013-2032) are contrary to the FAA and Chicago's own forecasts of traffic growth and delay. As stated by FAA in the FEIS:

> "The commenter appropriately notes that growth in aviation activity at O'Hare will cause delays at the Airport to rise in the future following completion of the OMP (if approved). Simulation results used in the DEIS clearly show that these delays will increase as demand continues to grow beyond 2013."
>
> FEIS, U.4-526 (emphasis added)

18. Using FAA's own 2002 Terminal Area Forecast (extrapolated over the project opening date plus 20 years required by FAA for benefit-cost justification, *i.e.*, 2013-2032) and the delay differentials represented in the delay curve generated FAA-Chicago modeling (called TAAMs modeling) Campbell-Hill finds that the delay savings will be far less and for a far shorter time than claimed by Chicago. In part this results from the increased aircraft taxi times that will be required because the new runways of the OMP are farther away from the terminals. The detailed analysis by Campbell-Hill is contained in the Campbell-Hill reports and materials: *Chicago's O'Hare Modernization Program Fails To Meet The FAA Tests For Benefit-Cost Justification* (June 6, 2005) and *Presentation to The Federal Aviation Administration In Regard to The City of Chicago Benefit-Cost Analysis In Support of Its Proposed O'Hare Modernization Program* (July 21, 2005). However I have enclosed a chart as Exhibit B to this affidavit which illustrates in simple terms why the

benefits of the full OMP are dramatically less than the costs. Instead of $1.04 in benefits for every $1.00 of costs — using Chicago and FAA's own forecast and delay curve data— the benefits of the full OMP would only be 27 cents for every $1.00 of cost:

19. Given this enormous discrepancy between the economic benefits of full build OMP and the huge costs of the OMP (only 27 cents of benefit for every dollar of costs) FAA is prohibited by law from awarding AIP discretionary grants for the full build OMP-Master Plan. For this reason, the more than $800 million in AIP discretionary funds that FAA assumes in the FEIS will be available to pay for a major portion of the cost of the full build OMP-Master Plan will not be available.

20. **The more than 3 billion dollars of Passenger Facility Charge (PFC funds) that FAA assumes will be available to pay for the full build OMP-Master Plan will not be available.** As shown by Table One above, FAA assumes that more than 3 billion dollars of PFC money will be available to pay for the $14.29 billion cost of full build OMP-Master Plan. As the Inspector General pointed out in his report, FAA is prohibited from authorizing the $3 billion in PFC funds (or awarding the projected $70 million in AIP "entitlement" funds shown in Table One) unless there is assurance that there are sufficient funds from other sources to pay the remaining costs of the project. With an $800 million dollar hole in the project financial plan because of the unavailability of AIP discretionary funds, the federal PFC statute prohibits FAA from authorizing the $3 billion in PFC funds or the $70 million shown in Table One for AIP entitlement funds.

21. **The FAA has also assumed PFC funds based on a $6.00 PFC authorization that has not been approved by Congress and likely will not be approved.** The barebones discussion by Chicago in its Master Plan and the even skimpier discussion of the financing needs in the FEIS assumes that Congress will authorize a 25% increase in the Passenger Facility Charge (PFC) from a current maximum of $4.50 to $6.00 per passenger. Based on my work for several of the major airlines in this country and in recognition of the severe financial stresses already on the airline industry, I feel certain that the airline industry

will vigorously oppose any proposed increase in the PFC charge. Failure by Congress to increase the PFC will leave an additional several hundred million dollar hole in the project. (As noted above, FAA is prohibited from authorizing any PFCs — even from the currently authorized $4.50— unless FAA can demonstrate that there are sufficient funds from other sources to pay for the project).

22. **There is no assurance that the "Majority In Interest" (MII) airlines will agree to underwrite the more than $8 billion in General Airport Revenue Bond (GARB) debt assumed by FAA in the FEIS to fund the full build OMP-Master Plan.** In order for the City of Chicago to issue bonds for the full build OMP-Master Plan, Chicago has to receive approval (under the terms of the lease between Chicago and the airlines which use O'Hare) from the "Majority In Interest" ("MII") airlines, which, given the high percentage of their flights at O'Hare, means United and American. This means that in order for Chicago to sell the more than $8 billion in General Airport Revenue Bonds (GARBs) assumed by FAA in the FEIS, Chicago must get MII approval from the major O'Hare airlines including United and American. FAA, in the FEIS, points to informal public relations statements of support by American and United for the full build OMP-Master Plan. Yet nowhere does FAA or Chicago provide any evidence of any commitment by American or United (or any of the other airlines serving O'Hare) to approve the issuance of more than $8 billion of GARBs to pay for the full build OMP-Master Plan. Indeed the only MII approval for GARBs is for a portion of the $3 billion Phase One (discussed below) and even that commitment is contingent on almost 1.5 billion dollars of PFC and AIP money being available — a contingency which cannot occur because of the problems with AIP and PFC funding for Phase One described below. Based on the economically perilous state of the airline industry over the last several years— and in particular the economic fragility of United and American— it is highly unlikely that these two airlines will support MII approval of the more than $8 billion in GARBs assumed by FAA. Indeed, it is far more likely that the fragile MII airlines will refuse to give MII approval for the GARB portion of

the full build OMP-Master Plan debt since the other principal sources (AIP and PFC) are likely to be unavailable — raising the amount that would need to be financed by GARBs even further. My conclusion about the reluctance or unwillingness of the MII airlines at O'Hare to commit to the GARB debt for the full OMP is further buttressed by the reported refusal of the MII airlines to approve funding in 2002 of the so-called "World Gateway" terminals — terminals whose multi-billion dollar cost is an integral part of the full build OMP-Master Plan— and terminals without which the passenger traffic that Chicago and FAA claim as benefits of the full build OMP-Master Plan cannot be accommodated.

23. **There is no evidence that any of the airlines serving O'Hare has the financial wherewithal or willingness to afford the more than 1.3 billion dollars in special facility bonds or third party financing for terminals for the full build OMP-Master Plan which the FAA assumes will be available.** As shown in Table One above FAA assumes that more than 1.3 billion dollars "third party" financing will be available. In the Master Plan, this component is also called "special facility" financing.

> The City intends to fund selected portions of the planned new terminal facilities at the Airport (i.e., WGP and West Terminal Complex) with third-party financing, which may or may not include special facility debt. This approach is consistent with the City's use of special facility debt to fund portions of the existing terminal facilities at the Airport.
>
> Master Plan p. VII-29

24. Special facility financing refers to bonds underwritten by the users of specific or "special" facilities at the airport — facilities that are not used by the airlines across the board. An example of a special facility requiring that a single airline underwrite "special facility" debt is the existing United Terminal One at O'Hare which was financed with a special facility bond underwritten by United. According to the Master Plan, Terminal 7 (the western terminal) is scheduled to be used exclusively by United and its alliance partners. Based on United's default on several hundred million dollars of special facility bonds on the existing United Terminal One, it is highly unlikely that United will be

able to sell special facility bonds and take on the several hundred million dollar cost of the western terminal. Nor has FAA or Chicago provided any evidence that any third party financing sources have demonstrated a willingness and commitment to provide over 1.3 billion dollars for terminal financing.

25. For the reasons stated above I conclude that it is not feasible to finance the $14.29 billion dollar cost of the full build OMP-Master Plan.

IV. Additional costs required by full build OMP-Master Plan which FAA has failed to include in its cost estimate of costs required for the full build OMP-Master Plan

26. I have reached my conclusion as to the lack of financial feasibility of the full build OMP-Master Plan strictly on the basis of the $14.29 billion cost estimate contained in the FAA's FEIS. There are additional costs associated with the full build OMP-Master Plan which — while not part of the basis of my conclusion in paragraph 14 above — provide additional evidence of the financial infeasibility and economic irrationality of the full build OMP-Master Plan:.

A. **The Cost of Airspace Changes.** The Inspector General's report stated that "a number of airspace changes need to be made outside of Chicago airspace to sustain the expected benefits of the OMP." Id at p. 21 According to the Inspector General "FAA has not yet finalized the costs and resource requirements for making these airspace changes." Id. Yet it is clear from the Inspector General's report that full build OMP-Master Plan will require that these airspace costs be identified and paid in order to carry the projected traffic. As stated by Congress' Office of Technology Assessment:

> "The three segments of the aviation system — airports, ATC facilities, and airspace use procedures — need to be developed in coordination. Piecemeal development could lead to inefficiencies, bottlenecks, and misdirected investment. For example, it would probably be a waste of resources to add runway capacity at an airport if the ATC system cannot be upgraded to handle the additional traffic in that area until several years later."

> Office of Technology Assessment (OTA) report (done for the House Public Works Committee) entitled *Airport System Development* (OTA-STI-231 1984) (emphasis added)

B. **Highway Costs.** It is clear from the surface transportation analysis conducted by the FAA that even the increased surface traffic projections for 2018 (only five years after the full build OMP-Master Plan is scheduled) for the traffic to and from the airport will require additional surface road modifications to carry the forecast surface traffic for the airport. At page 5.3-60 of the FEIS FAA states that FAA is "continuing discussions" with Chicago to identify "appropriate mitigation initiatives to address the project related surface traffic for the Build Alternatives". According to the FAA these "mitigation initiatives" could include payment by Chicago of a "prorated" share of the "total estimated costs of planning, designing, and constructing the required improvements to the significantly impacted roadway segments and intersections." Id at 5.3-60. Yet these costs are not identified (nor included, as they should have been, in Chicago's benefit-cost application for AIP funding). Further, the FAA's use of an end date of 2018 for its FEIS analysis (only five years after the project opens) ignores the even more substantial costs that will be imposed in surface roads and intersections beyond 2018. As discussed below, FAA should have used a project start plus 20 years as the period of analysis. This would allow FAA to coordinate its impact and highway cost analysis with the regional transportation plan which has a 2030 planning horizon and with FAA's own benefit-cost requirements for AIP funding for the full build OMP-Master Plan which require a start date (here 2013) plus 20 years (2032) as the period of analysis. By using a start date plus 20 years, it is likely that the surface traffic associated with airport demand (as predicted by the extended 2003 or 2004 Terminal Area Forecast) would far exceed the capacities of the existing surface roads and intersections. Payment of the airport's pro-rata share of the roadway changes needed to meet the airport related surface traffic demand (*e.g.*, expressways) through

the end of the period of analysis (2032) would be a very large cost that has not been identified by FAA.

C. **Capitalized Interest.** We stated in our earlier comments that the interest that Chicago must pay during construction is properly an element of the capital cost of the project. Including capitalized interest adds a billion or more dollars to the capital cost of the full build OMP-Master Plan. (See my discussion, *infra*, of FAA assertions).

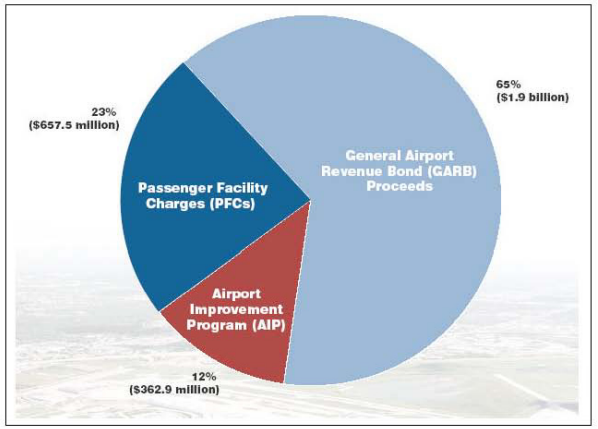
D. **Lack of a Detailed Line Item Quantity and Unit Cost Estimate for the full build OMP-Master Plan with appropriate contingency costs.** The Inspector General emphasized that the OMP's cost estimates be "realistic, reasonable, and credible." Id at 3. Compounding the problem of the current FAA estimate is the fact that there is no detailed current 2005 line item and quantity and unit cost estimate for the project. Instead FAA has provided a hodgepodge of disorganized piecemeal estimates predicated on a cost analysis performed in 2003. The Inspector General emphasized that cost estimates performed several years ago are unreliable. Given the very large rise in the cost of raw materials (*e.g.*, steel) mentioned by the Inspector General and the massive rise in fuel costs, generic adjustments for general inflation are highly inaccurate and biased to the low side. For a project approval and FAA funding on a project that the FAA itself acknowledges will cost $14.29 billion dollars, fundamental economic prudence dictates that a current 2005 line item and quantity and unit cost estimate (with a significant contingency cost component) be prepared for the project to verify — in the Inspector General's words — that the costs are "realistic" and "credible".

V. The Phase One Project is not Financially Feasible.

27. It is equally obvious that the Phase One project is not financially feasible. Neither Chicago nor FAA has demonstrated that sufficient financial resources are committed to insure completion of Phase One. As the Inspector General's report

emphasized, FAA has a statutory mandate (and a corresponding statutory prohibition) to withhold AIP and PFC funding unless assurances of complete funding are in place.

28. Chicago has told FAA that Phase One will cost $2.9 billion dollars and that the sources of funding for the Phase One project are as follows:



29. The reasons why I conclude that Phase One is not financially feasible and why sufficient funds have not been committed to assure completion of Phase One are as follows.

30. **The $300 million dollars in AIP "discretionary" funds Chicago says it needs are not available and FAA is prohibited from awarding the $300 million dollar AIP discretionary grant for Phase One because the benefits are far less than the costs.** Of the $362 million Chicago says it will obtain from AIP funds, Chicago seeks $300 million from "discretionary" AIP funding and approximately 60 million from AIP "entitlement" funds. As discussed above, the federal AIP statute prohibits FAA from awarding AIP "discretionary" funds unless the project benefits exceed the costs.

31. Chicago has submitted to FAA a Benefit-Cost analysis claiming that the benefits of Phase One are $2.13 for every $1.00 of cost or a benefit cost ratio of 2.13.

32. However, an examination of the Chicago benefit-cost analysis (used to produce that benefit-cost comparison of 2.13 for Phase One) discloses that Chicago ignored the very FAA demand forecast and the very FAA capacity and delay modeling results used by FAA in the FEIS.

33. In order to push asserted economic benefits above the cost of Phase One , Chicago assumed that traffic under Phase One would stay constant at 974,000 operations for the next 20 years after the Phase One project opened (the initial runway of Phase One is scheduled for 2007 and the full Phase One to open in 2009 leading to a planning and analysis horizon of 2028) and that the delay differential between the Phase One and the existing airport (i.e., the asserted minutes of delay savings claimed by Chicago) that Chicago and the FAA predicted for the year 2009 would stay the same for the period 2009-2028. These assumptions (constant traffic level at 974,000 operations and constant delay differential — both throughout the period 2009-2028) are contrary to the FAA and Chicago's own forecasts of traffic growth and delay and they are contrary to any sensible real life analysis of the future and to the stated requirements in the FAA's BCA Guidance.

34. Using FAA's own 2002 Terminal Area Forecast (extrapolated over the project opening date plus 20 years required by FAA for benefit-cost justification, i.e., 2009-2028) and the delay differentials represented in the delay curve generated FAA-Chicago modeling for Phase One (called TAAMs modeling) Campbell-Hill finds that the travel time savings for Phase One will be far less and for a far shorter time than claimed by Chicago. In part this results from the increased taxi times that will be required because the new runways of the OMP are farther away from the terminals. The detailed analysis by Campbell-Hill is contained in the Campbell-Hill reports and materials: *Chicago's O'Hare Modernization Program Fails To Meet The FAA Tests For Benefit-Cost Justification* (June 6, 2005) and *Presentation to The Federal Aviation Administration In Regard to The City of Chicago Benefit-Cost Analysis In Support of Its Proposed O'Hare Modernization Program* (July 21, 2005).

35. However the chart attached to this affidavit as Exhibit C illustrates in simple terms why the benefits of the full Phase One are dramatically less than the costs. Instead of $2.13 in benefits for every $1.00 of costs — using Chicago and FAA's own forecast and delay curve data— the benefits of the Phase One would less than one cent for every $1.00 of cost. The area marked in green is where Phase One (based on Chicago and FAA's own modeling) would have a lower average travel time than the existing airport. The area marked in red is where (because of rapidly rising delays with Phase One and higher taxi times) Phase One would have higher average travel time than the existing airport.

36. Given this enormous discrepancy between the economic benefits of Phase One and the cost of Phase One (less than 1 cent of benefit for every dollar of costs) FAA is prohibited by law from awarding AIP discretionary grants for Phase One. For this reason, the $300 million in AIP discretionary funds that FAA assumes in the FEIS will be available to pay for a major portion of the cost of the Phase One will not be available.

37. **The more than $1 billion dollars Chicago is seeking in PFC authorizations for Phase One will not be available.** Chicago is seeking more than $1

billion in PFC authorization for Phase One (several hundred million dollars of this authorization is to pay interest on the PFC bonds because the income stream for these PFCs will not be available for many years.) As discussed above and noted by the Inspector General in his report, FAA is prohibited by statute from authorizing PFC funds unless the applicant can show that sufficient funding is available from other sources to pay for the remainder of the project. Since it is clear that FAA is prohibited from awarding any AIP discretionary funds for Phase One, FAA will necessarily be prohibited from awarding the PFCs unless Chicago can demonstrate that sufficient funds are available from other sources. Chicago has made no such demonstration. Similarly the approximately 60 million dollars Chicago seeks in AIP "entitlement" funds for Phase One will equally be prohibited because of the funding shortfall.

38. **The Lima Lima Taxiway shortfall.** Correspondence between Chicago and the FAA indicates that Chicago has removed the Lima Lima taxiway and its associated costs from the Phase One project. FAA does not discuss the Lima Lima issue in the FEIS but news media reports have reported the cost of Lima Lima at $200-$250 million. Chicago's entire benefits analysis and the entire modeling of Phase One by FAA in the FEIS to assess Phase One's impact and performance is predicated on the Lima Lima taxiway being in place. If FAA wishes to fund Phase One with either AIP or PFC funds, FAA must demonstrate that sufficient funds to pay for Lima Lima are in place and should require the preparation of a new cost estimate for Phase One and a new benefit-cost analysis including the added cost of Lima Lima. Without that funding assurance for Lima Lima in place, FAA will be prohibited by statute from providing either AIP funds or PFC funds.

39. **The Majority In Interest Airline** GARB **commitment for Phase One is contingent on all other sources of funding being secure.** As noted by the Inspector General's report, the airlines have not provided a MII commitment and approval for the full build OMP-Master Plan and the airlines' MII commitment to General Airport Revenue Bonds for a portion of Phase One is contingent on the other sources of money for Phase One

being available and assured. Since, as demonstrated above, federal statutes prohibit FAA from awarding AIP and PFC funds, and since there is an additional $200-$250 million shortfall with the Lima Lima taxiway (there is no evidence that the airlines have provided additional MII approvals to pursue GARB funding for Lima Lima), there necessarily is no assurance that the airlines GARB commitment for Phase One will materialize. Indeed, given the express contingency limitation of the airlines MII approval of Phase One, the airline commitment does not exist without the assurance of these other funding sources.

40. For the reasons stated above I conclude that it is not feasible to finance the $2.9 billion (or more depending on the status of the Lima Lima taxiway) cost of Phase One.

VI. FAA's Unsupported Assumptions regarding Financial Feasibility

41. The Inspector General warned FAA that it could not and should not make assumptions and conclusions that had no basis in fact and warned FAA that bald reliance on FAA's self-declared "expertise" should not and will not be accepted by the courts. Yet it is just such reliance on bald unsupported assumptions and "expert" opinion that marks FAA's bare bones conclusion (based more on wishful thinking than on any evidence) that the full funding of these massive costs for full build OMP-Master Plan and Phase One will be available.

42. As set forth above, I and Campbell-Hill have provided specific facts as to why the full build OMP-Master Plan and Phase One have fatal financial feasibility problems. At no place in the FEIS does FAA address any of these very substantial and most likely fatal financial problems. Instead FAA in the FEIS simply parrots unsupported assumptions and conclusions which have no evidentiary foundation:

> "…FAA has no reason to believe that the City's financial plan cannot be implemented as generally presented in the ORD Master Plan."
>
> FEIS 1-57
>
> "FAA has concluded that it is reasonable to assume that, based upon the impact O'Hare has on the Chicago region, as well as

the NAS, and the benefits to the regional economy, there will be sufficient funds to complete the City's proposal, if approved."

Id. (emphasis added)

43. FAA's sole justification for these bald unsupported assumptions and conclusions is that earlier bonds issued by the City to pay for a portion of Phase One were given "investment-grade" ratings and are thus an indication that the financial community considers Chicago's financial plan as reasonable. (FEIS at 1-57). But as Campbell-Hill pointed out in its April 6, 2005 report, (page 59, Section 3.3.3) the prospectuses for those bond issues claimed benefits (benefits which cannot be substantiated) for the entire full build OMP-Master Plan without ever revealing the true costs of the full build OMP-Master Plan and without revealing the problems that the full build OMP-Master Plan and Phase One have with AIP and PFC financing. Indeed, these prospectuses claimed that OMP would produce a 70 percent reduction in delays (which FAA's own modeling shows is not the case and FAA's own modeling shows that rising delays under Phase One and full build OMP-Master Plan will quickly exhaust any delay savings). Similarly, the prospectuses claimed that the full build OMP-Master Plan would meet the forecast demand through the year 2030 when we know that the full build OMP-Master Plan will run out of capacity shortly after it opens. FAA certainly cannot assert that these earlier bond prospectuses revealed to the investment community all of the material costs of the full build OMP-Master Plan, the financing problems with AIP and PFC funding, and the rapid rise in delays that will be experienced in both Phase One and full build OMP-Master Plan.

VII. The Implications of the Facts Demonstrating that neither the full build OMP-Master Plan nor Phase One are financially feasible.

44. The facts set forth above in my analysis demonstrate with a high degree of probability that Chicago cannot assemble the financial resources necessary to build the $14.29 billion (the amount FAA admits to, it is likely more) full build OMP-Master Plan.

Nor has Chicago demonstrated that it can assemble the resources needed to build the $2.9 billion Phase One project.

45. The lack of financial feasibility for both full build OMP-Master Plan and Phase One has major implications on the consideration of aviation needs, adverse impacts and destruction of homes, businesses, parklands and religious cemeteries, and on the availability of ORD alternatives to avoid this destruction.

46. **The Implications of the Financial Infeasibility of the full build OMP-Master Plan** Central to the FAA's proposed action in approving the full build OMP-Master Plan is FAA's categorical rejection of what FAA calls "blended alternatives". As described in more detail below, a "blended alternative" is simply using the existing airport (or some smaller added increment of runways of lesser scope than full OMP) in combination with demand management and the use of other airports. Blended alternatives have historically been widely used by FAA in metropolitan areas across the country and are currently in use or proposed for use in major urban centers nationwide. FAA currently uses a blended alternative (*i.e.*, demand management plus the use of other airports) at O'Hare, Reagan National, and New York's LaGuardia and is proposing blended alternatives (*i.e.*, a physical airport smaller than required to accommodate the so-called "unconstrained" demand with some form of a mechanism to cause the use of other airports) at Los Angeles LAX, and Boston's Logan. Similarly, based on forecast demand at Midway and the capacity analysis described by FAA in the FEIS, FAA will be required to implement a blended alternative at Midway within a very few years. Indeed, in the last consideration of major expansion at O'Hare, Chicago and the FAA in 1984 expressly selected a blended alternative at O'Hare to avoid damage to surrounding communities.

47. FAA implicitly acknowledges — and the Inspector General expressly emphasizes — that if the full build OMP-Master Plan is not built (*e.g.*, because the project cannot be funded), some form of blended alternative will be required at O'Hare. Once that fact is accepted, there are a variety of blended alternatives at O'Hare that can meet demand,

control delays to desired levels, and avoid destruction of the homes, businesses, parklands and religious cemeteries in the surrounding communities.

48. The FAA's unsupported assumption that the full build OMP-Master Plan is financially feasible— *i.e.,* that sufficient financial resources are or will be available to complete the full build OMP-Master Plan — is central to the FAA's conclusions: i) that the proposed modifications will meet the FAA's stated purpose and need; ii) that there are no alternatives to the proposed modification that would avoid the destruction:

A. FAA asserts that the full build OMP-Master Plan is needed to (and will) meet the stated purpose and need of meeting all "unconstrained" future traffic demand at O'Hare (an assertion that is in error as discussed below).

B. On the basis of that assertion FAA categorically rejects the use of "blended alternatives" (alternatives which combine the use of a lesser scale O'Hare with demand management and use of other airports) on the argument that only alternatives at O'Hare which meet the "unconstrained" demand will be considered; and since blended alternatives do not meet the "unconstrained" demand, these alternatives are rejected.

49. Assuming *arguendo* that full build OMP-Master Plan will meet unconstrained demand (as discussed below, the data strongly contradict FAA's assertion that full build OMP-Master Plan will meet the unconstrained demand), if there is insufficient funding for the massive $14.29 billion full build OMP-Master Plan, FAA, of necessity will be compelled to use a "blended alternative". The Inspector General's report emphasizes this point. Once the inevitable and unavoidable need to use a "blended alternative' is acknowledged, then FAA must necessarily consider a variety of blended alternatives, including blended alternatives that either use the existing airport (*i.e.,* without additional runways) or blended alternatives using other runway variants (of lesser size at O'Hare than full build OMP-Master Plan) that could meet the demand while avoiding the destruction of homes, businesses, parklands and the St. Johannes Religious Cemetery.

50. The Inspector General recommended that FAA confirm that the financial resources for the entire full build OMP-Master Plan be certain before proceeding with the funding of Phase One. If FAA is unable to confirm the availability of the full funding for full build OMP-Master Plan, FAA must necessarily consider blended alternatives for Phase One as well as other blended alternatives. FAA has rejected all blended alternatives, including a blended alternative for Phase One. If FAA is unable to confirm the availability of the full funding for full build OMP-Master Plan, FAA should be required to explore these other blended alternatives before allowing the destruction of homes, businesses, parklands and the St. Johannes Religious Cemetery.

51. **The Implications of the Fact That Phase One is Not Financially Feasible**. FAA agrees that Phase One will not meet the FAA's stated need to accommodate unconstrained demand and implicitly acknowledges that if only Phase One is built (or anything short of full build OMP-Master Plan) FAA will be required to use a blended alternative at O'Hare.

52. But FAA refuses to examine Phase One in comparison to other existing and potential blended alternatives at O'Hare on two central assertions:

A. FAA asserts that only full build OMP-Master Plan will meet "unconstrained demand" at O'Hare and that meeting the so-called "unconstrained demand" for forecast operations is an unconditional requirement of any alternative. (As discussed below full build OMP-Master Plan does not meet unconstrained demand and even full build OMP-Master Plan will need to use a blended alternative. However, for purposes of the financial feasibility issue, I have accepted *arguendo*, this assertion)

B. FAA's blind unsupported claim — without addressing any of the fatal financial flaws described above — that the $14.29 billion dollars will somehow materialize.

53. Based on this bizarre reasoning, FAA intends to proceed with approving the construction of Phase One — and the associated destruction of homes, businesses, parklands, and the destruction of St. Johannes Cemetery — on the assertion that Phase One is simply a part of the (in FAA's mind) inevitable construction of full build OMP-Master Plan. FAA simply refuses to consider the implications of Phase One (if only Phase One is constructed) or some form of O'Hare configuration less than full build OMP-Master Plan as being a potential reality).

54. But there are additional implications for the lack of financial resources to build Phase One. Without having the money to build Phase One in place (and likely not being able to assemble the money for the reasons stated above) FAA is intending to allow Chicago to bulldoze and destroy the homes, businesses, parklands, and the destroy St. Johannes Cemetery before FAA conducts the analysis and reaches a conclusion on the availability of funds to build the Phase One project. FAA's proposed action creates the distinct likelihood that Chicago's bulldozers will destroy these resources only to find later that the money is not there to complete the Phase One project.

55. It is my opinion that FAA's proposed action to allow the acquisition and destruction of these properties before FAA determines that the money to build Phase One is available is arbitrary and irrational. Without the AIP, PFC and GARB funds discussed above and required for Phase One, these homes, businesses, parklands and religious cemetery will have been destroyed for no purpose.

56. It is also arbitrary and irrational for FAA to allow the destruction of homes, businesses, parklands and the St. Johannes Religious Cemetery until it determines if there is sufficient money available for the full build OMP-Master Plan. As discussed above, if there is not sufficient money to construct the full build OMP-Master Plan, then FAA will necessarily (as pointed out by the Inspector General) be compelled to investigate the use of blended alternatives — something FAA has refused to do to this date. Once FAA examines blended alternatives, FAA has already conceded that there are blended alternatives that will

not destroy the homes, businesses, parklands and religious cemetery that Chicago proposes to destroy (with FAA funding) for Phase One.

VIII. The Three Variables That FAA Has Used To Support its Decision To Approve full build OMP-Master Plan.

57. FAA has used three principal variables in reaching its conclusion that Chicago's full build OMP-Master Plan project will meet the "unconstrained" forecast demand at acceptable levels of delay:

A. **The Forecast Demand**.

B. **The Acceptable Level of Delay**

C. **The Time Period of Analysis.**

Changes or manipulation of any one of these variables — either alone or in combination— can and have lead to dramatic misstatements about the capacity of either Phase One or the full build OMP-Master Plan, and the time at which that capacity is exhausted, as well as to dramatic misstatements and erroneous conclusions about alternatives to Phase One and full build OMP-Master Plan.

58. The **Forecast Demand** is a key variable in determining the size and configuration of the facilities needed to meet what is called "unconstrained" demand and is also key in determining when the capacity of a proposed facility will be exhausted. If the Forecast Demand is larger and grows faster in one forecast as compared to another forecast, the date at which the proposed facility's capacity is exhausted will be substantially different. If the capacity is exhausted at an earlier date, then the alternatives that FAA must consider change considerably. As discussed below, the FAA's failure to use a more current Forecast Demand (e.g., the 2003 or 2004 Terminal Area Forecast (TAF)) instead of the 2002 Terminal Area Forecast, has a major impact on the ability of the proposed full build OMP-Master Plan and Phase I airfields to meet future demand. Use of either the 2003 or 2004 TAF shows that the capacity of the full build OMP-Master Plan will be exhausted either at

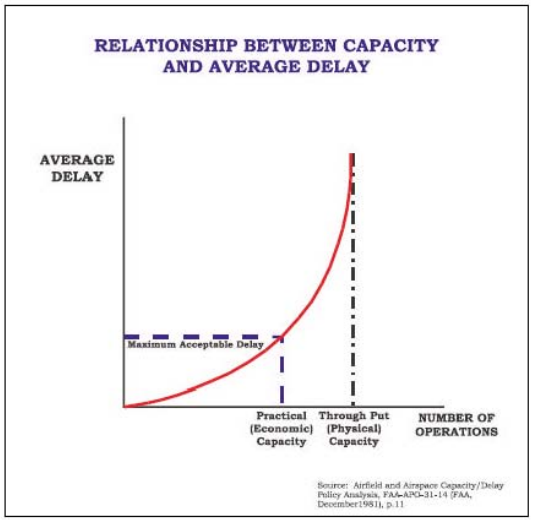
the time it opens (depending on what level of delay is deemed acceptable as a measure of capacity) or within a few years after it opens — leading to the necessity for FAA to employ blended alternatives of congestion management and use of other airports to accommodate the so-called "unconstrained" demand even with full build OMP-Master Plan.

59. FAA in the FEIS categorically rejects the use of blended alternatives but the fact that FAA will be required to use a blended alternative even with full build OMP-Master Plan means that FAA can certainly consider other blended alternatives that would not require the destruction of the homes, businesses and parklands in Bensenville and Elk Grove Village and the destruction of St. Johannes Cemetery

60. The **Acceptable Level of Delay** is a second key determinant in the capacity of an existing facility. To determine when the capacity of a proposed facility will be exhausted, FAA uses a delay simulation model to calculate what the level of delay will be at a given level of **Forecast Demand.** Obviously, the higher level of delay one deems to be acceptable, the higher the capacity (*i.e.,* the number of operations) for a given facility.

61. In discussions of what is an Acceptable Level Of Delay, the FAA uses the term "Average Annual All Weather" Delay or "AAAW". The values given for Average Annual All Weather Delay can be deceptive in that a given value for AAAW delay will often mask a much higher average delay in bad weather. For example, a 14.2 minute AAAW delay predicted by FAA for Phase One in the year 2013 (using the low 2002 TAF forecast) predicts that average bad weather delays will be in the 70-90 minute range. As discussed below, FAA has deliberately used a very high and misleading number as to acceptable levels of delay for Phase One and full build OMP-Master Plan – 15 minutes AAAW — thus overstating the capacity of these facilities. However, FAA refuses to disclose the level of "bad weather" or IFR delay that will occur when full build OMP-Master Plan reaches 15 minutes AAAW, thereby ignoring the issue of whether IFR delays are proportionally lower with OMP.

62. FAA and the U.S Department of Transportation have made a number of statements about what the acceptable level of delay and the practical capacity of an airport. The analysis of delay and capacity (including practical capacity) is governed by a capacity delay curve published by the FAA:



This chart applies to every airport — including the existing O'Hare and the proposed Phase One and full build OMP-Master Plan.

63. The key variables in examining this chart in the context of any airport are:

A. **The level of delay that one deems acceptable (the higher the delay that is acceptable the higher the practical capacity).** For example if one says that the acceptable delay (*i.e.,* the proxy for practical capacity) is 15 minutes you can get more traffic through the airport than if you say the acceptable level of delay is 4 or 6

minutes. Which level one selects depends upon the level of delay one finds acceptable and the consequences (*e.g.*, cancellations, chaotic conditions, see discussion by USDOT below) of that level of delay. In economic terms, the level of acceptable delay one selects is the **"supply"** side of the equation. It controls how much traffic can go through the airport.

B. **The Forecast Demand and the timing of that demand, *i.e.*, the year that the traffic volume rises to the level that the delay curve turns vertical**. How soon the airport facility (in this case Phase One or full build OMP-Master Plan) runs out of capacity and reached the assumed level of acceptable delay depends upon the forecast demand and the year at which the forecast demand produces that delay level.

64. The following is what FAA and DOT and Chicago have said about the level of average annual delay that is either "acceptable" or "tolerable.

1998-2002 NPIAS

"Experience shows that delay increases gradually with rising levels of traffic until the practical capacity of an airport is reached, at which point the average delay per aircraft operation is in the range of 3 to 5 minutes. Delays increase rapidly once traffic demand increases beyond this level. An airport is considered to be congested when average delay exceeds 5 minutes per operation. Beyond this point delays are extremely volatile, and a small increase in traffic, adverse weather conditions, or other disruptions can result in lengthy delays that upset flight schedules and impose a heavy workload on the air traffic control system."

FAA *National Plan for Integrated Airport Systems* (NPIAS) (1998-2002), p. 10 (emphasis added).

2005-2009 NPIAS

"The Annual Service Volume (ASV), at a particular level of delay, is used to measure airfield capacity at individual airports. Traditionally, a delay of four to six minutes per aircraft operation is used in ASV calculations. The relationship between aircraft operations and delay is non-linear, and often exponential. Experience shows that airfield delay increases gradually with rising levels of traffic until a certain level is

reached. Thereafter, the delay rises more rapidly with increased traffic. For larger airports, it is our observation that the onset of the more rapid growth in delay often occurs when delay is between 4 and 6 minutes per aircraft operation."

NPIAS (2005-2009) p. 12 (emphasis added)

The City of Chicago March 2004 LOI Application

"According to the *FAA's National Plan of Integrated Airports Systems (NPIAS), March 1999*, and the *BCA Guidance*, an airport is at practical capacity when the average annual delay reaches a range of 4 to 6 minutes per operation"

Chicago March 2004 LOI Application, page II-14 (emphasis added)[1]

The 1995 DOT HDR Study

There has long been a recognition that — despite the fact that 4 minutes AAAW is the desired goal — in actuality several major airports are operating at higher levels of AAAW delays. This reality was recognized in the DOT's 1995 High Density Rule Report which spoke of the limits of "tolerable" AAAW delay:

The 1995 DOT HDR report states:

> There are no defined criteria that delineate acceptable versus unacceptable delays. **FAA has historically regarded up to four minutes of AAAW delay per operation to be an "acceptable" level.** At some airports, however, this level of delay is exceeded on a regular basis. At the largest airport facilities, AAAW delays in excess of six minutes per operation are routinely experienced. Growth in delays to higher levels has and will continue to occur at airports with increasing operations, at least until new capacity can be added.
>
> In the absence of specific acceptability criteria for delays, a level-of-service scale has been developed to describe the operational conditions generally associated with increasing AAAW delays. This scale provides a means to gauge the extent to which delays ***will be tolerated*** rather than accepted. On the basis of AAAW delay, ***operational conditions at large hub airports*** could be characterized as follows:
>
> - 0 to 4 minutes of delay per operation: efficient overall operations; delays limited to the most extreme weather conditions.

[1] In the 1990s Chicago made the following statement: "The practical capacity of the airfield will be defined as the maximum level of average all-weather throughput achievable while maintaining an acceptable level of delay. * * *Ten minutes per aircraft operation will be used as the maximum level of acceptable delay for the assessment of the existing airfield's capacity… This level of delay represents an upper bound for acceptable delays at major hub airports . . ."(Landrum & Brown January 1993 Demand Forecast Analysis for the City of Chicago)

- 4 to 6 minutes of delay per operation: less *efficient* overall operations; limited peak hour VFR delays along with IFR delays experienced in both moderate and extreme weather conditions.

- ***6 to 8 minutes of delay per operation: increasing VFR delays in peak hours; increasing delays and eroding operational reliability in IFR conditions; high sensitivity to operational anomalies.***

- ***8 to 10 minutes of delay per operation: increasing VFR delays in peak hours with translation to shoulder hours in all but optimum conditions; high delay in IFR with resulting flight cancellations. -***

- ***Over 10 minutes of delay per operation: VFR operations experience increasing delays in peak periods and shoulder hours in all but optimum conditions; very high delays in IFR resulting in extensive flight cancellations.***

***

…[W]hen the AAAW delay per operation reaches **6 minutes**, project planning, engineering and design of capacity improvements should be actively pursued. When AAAW delay reaches **eight minutes**, implementation of capacity improvements should be underway.

1995 DOT HDR Report, Technical Supplement # 3, page D-2 (emphasis added in bold underscore and italics)

65. For the O'Hare FEIS, FAA has refused to identify the Acceptable Level of Delay for full build OMP-Master Plan but stated that traffic growth would stop when AAAW delay reached 15 minutes AAAW:

> "A thorough evaluation of analytical data that examines the relationship between aircraft delay and airport capacity indicates that market forces will likely constrain aircraft operations at O'Hare when average annual delay reaches approximately 15 minutes per operation. Selection of this level of delay as the metric to "cap" aircraft operations in a constrained (i.e., no action) environment is consistent with the FAA's Benefit-Cost Analysis guidance, historical data collected from O'Hare and other highly-delayed U.S. airports, and precedents set in other recent EIS efforts' supporting capacity-enhancing projects at representative large airports."
>
> FEIS Appendix B, B-22

66. FAA has not provided any "analytical data" — let alone any document containing a "thorough evaluation" of that "analytical data" to support its statement that traffic will stop growing at 15 minutes AAAW, as opposed to some lesser AAAW value. FAA has cited no evidence from "precedents" in other "recent EIS efforts' supporting capacity-enhancing projects at representative large airports" that support this statement of 15 minutes as a cap on operations. Nor, has FAA produced any data and statistical analysis (apart from FAA's *ipse dixit* statement) showing that the values FAA has modeled at 15 minutes in its FEIS preparation have a valid statistical correlation with any historical data at O'Hare or elsewhere.

67. Every other airport cited by FAA stated that acceptable delay limits — *i.e.*, the measure of acceptable capacity — was ten minutes or less – nowhere near the 15 minute ceiling used by FAA in the O'Hare EIS:

> The Miami International Airport EIS1 used 10 minutes per operation of average annual delay as a measure of acceptable delay, citing it as a "national standard." The Denver International Airport EIS2 used 6 minutes per operation of average annual delay. … At Boston Logan, delays averaged 7.86 minutes per operation over this period, and it was concluded that actions to reduce delay were required as delays approached 8 minutes per operation.

68. **The Time Period of Analysis** is the third variable that is critically important. Selecting too short a Time Period of Analysis can produce a very misleading picture of the ability of a given facility to meet the aviation demands of the region or even the aviation demand projected for a specific facility. Too short a Time Period of Analysis also creates a false and misleading benefit/cost picture. Similarly, because delays grow as demand grows over time, selection of too short a Time Period of Analysis can produce a very misleading picture of the ability of the facility to reduce delays. In FAA's planning grant to Chicago to analyze the impacts and capacity and delays associated with the full build OMP-Master Plan, FAA wisely required a **Time Period of Analysis** to the year 2030:

> "It is anticipated that planning activity levels of 2015 and 2030 based on the most recent TAF will be identified at the basis of this effort"
>
> March 7, 2002 FAA grant to Chicago, Scope of Work at p. 2 (emphasis added)

Similarly, in Chicago's application for the AIP discretionary money for full build OMP-Master Plan, Chicago is required by the FAA to use a **Time Period of Analysis** of the date the project is scheduled to open (2013) plus 20 years – or a Time Period of Analysis from the opening of the project to the year 2032.

69. In contrast to the Time Period of Analysis of 2030 directed by FAA in its multi-million dollar planning grant for OMP, and in contrast to FAA's requirement for federal AIP discretionary funding for OMP to use a Time Period of Analysis of project start plus 20 years (*i.e.*, 2013 to 2032), FAA in the FEIS only used a Time Period of Analysis of 5 years (*i.e.* ,from 2013-2018). By using this very short 5 year Time Period of Analysis FAA reached misleading and incorrect conclusions about: 1) the ability of the full build OMP-Master Plan to meet the "unconstrained" forecast demand, 2) the need for and availability of blended alternatives that will be required to be used with full build OMP-Master Plan and which blended alternatives can be used with lesser scaled development at O'Hare, and 3) the impacts of the project.

IX. FAA's Manipulation of the Three Variables (Forecast Demand; Acceptable Level of Delay; and Time Period of Analysis) To Reach Incorrect and Misleading Conclusions About full build OMP-Master Plan.

70. FAA has stated that it rejected any alternatives which did not have the capacity to meet "unconstrained forecast demand"(FEIS U.4-594, U.4-586, U.4-253 *passim*). FAA also concluded that Alternative C (*i.e.*, the full build OMP-Master Plan proposed by Chicago) would meet unconstrained forecast demand and therefore was eligible to be selected as the preferred alternative. By making this assertion, FAA was able to claim that it need not consider any blended alternatives (discussed below) because FAA's preferred alternative (Alternative C) met the "unconstrained" demand.

71. In making this assertion — that full build OMP-Master Plan (Alternative C) would meet unconstrained forecast demand — FAA improperly manipulated each of the three principal variables just discussed: 1) Forecast Demand; 2) The Acceptable Period of Delay, and 3) the Time Period of Analysis. FAA performed this manipulation to conceal the problems with the full build OMP-Master Plan; to conceal the fact that the full build OMP-Master Plan will not meet the unconstrained demand; and to avoid the fact that FAA will be required to use a blended alternative (*i.e.*, demand management and the use of other airports) with the full build OMP-Master Plan to accommodate the "unconstrained" forecast demand.

72. Once that likelihood is established — *i.e.*, that FAA will be required — even with Alternative C— to utilize blended alternatives, then there is no reason why FAA cannot and should not consider blended alternatives at lesser levels of development at O'Hare — including the existing O'Hare or other runway options that do not destroy the homes, businesses, parkland and St. Johannes Religious Cemetery.

73. Rather than address the collective impact of FAA's misuse of all three major variables, I first address the individual impact of FAA's misuse of each of the principal variables:

74. **The Understated Forecast Demand.** FAA persists in using the 2002 TAF even though later TAFs (2003 and 2004) show that the Forecast Demand will reach the point where — even under the FAA's unprecedented use of a 15 minute AAAW standard — Alternative C (*i.e.*, the full build OMP-Master Plan) will be out of capacity within a few years after the project opens. Attached as Exhibit D to this affidavit is a spreadsheet showing the Forecast Demand of ORD operations under the 2002 TAF through the 2004 TAF. The following analysis examines the implications of using the different forecasts in terms of the ability of OMP to handle projected demand[2]:

[2] The predicted years when full build OMP will hit various delay levels is based on three model results provided for OMP: (1) 5.8 minutes of AAAW delay at 1.2. million operations from FEIS modeling of Alternative C, (2)

A. **The 2003 TAF** The 2003 TAF shows that the Forecast Demand will hit the FAA's 15 minute AAAW ceiling in the 2018-2019 time frame. FAA refused to model the 2003 TAF (see discussion below) but in Appendix R to the FEIS makes the following statement that is applicable to the 2003 TAF:

> "Using extrapolation and professional judgment, the FAA believes that Alternative C with the high range forecast would most likely perform at an average annual delay of between 13 and 16 minutes per operation at the high range forecast level in 2018 (1.4 million operations).

Given the slope of the delay curve, it is virtually certain under the 2003 TAF Alternative C (full build OMP-Master Plan) will exhaust its capacity by 2018-2019. If one used the lower numbers for the **Level of Acceptable Delay** used elsewhere by FAA (even the highest number used elsewhere, *i.e.,* 10 minute AAAW) then Alternative C (full build OMP-Master Plan) will exhaust its capacity even sooner (approximately 2015 for a 10-minute delay; between 2013 and 2015 for an 6-8 minute delay) using the 2003 TAF.

B. **The 2004 TAF.** FAA asserts that it is justified in part in refusing to run the modeling on the 2003 TAF because the 2004 TAF "validates" the use of the 2002 TAF (FEIS U.4-31, U.4-538 *passim*). On the contrary, despite its questionable evidentiary foundation (see discussion below) the 2004 TAF demonstrates that under the 2004 TAF Alternative C (full build OMP-Master Plan) will exhaust its capacity by 2023 under FAA's extreme 15 minute AAAW standard. If one used the lower numbers for the **Level of Acceptable Delay** used elsewhere by FAA (even the highest number used elsewhere, *i.e.,* 10 minute AAAW) then Alternative C (full build OMP-Master Plan) will exhaust its capacity even sooner (approximately 2019 for a 10-minute delay; between 2016 and 2018 for an 6-8 minute delay) using the 2004 TAF. Contrary

10.9 minutes of delay at 1.3 million operations from Ricondo's 2003 study, and (3) 13-16 minutes of delay at 1.4 million operations from FEIS Appendix R (see Exhibit D). These results correspond closely to Campbell-Hill's analysis of delay levels using the Campbell-Hill Adjustment A curves.

to the statements in the FEIS, the use of the 2004 TAF demonstrates unequivocally that Alternative C will exhaust its capacity under the 2004 TAF Forecast Demand and FAA will be required to use a blended alternative (*i.e.,* demand management and other airports) in combination with Alternative C. If FAA can and must use a blended alternative with full build OMP-Master Plan there is no reason why FAA cannot employ either existing O'Hare or lesser levels of development at O'Hare in combination with demand management and use of other airports) — blended alternatives which would avoid the destruction of the homes, businesses and parklands in Bensenville and Elk Grove Village and the destruction of St. Johannes Cemetery.

C. **The 2002 TAF.** FAA persists in using the 2002 TAF because FAA says it would take too long to use the 2003 or 2004 TAF in another modeling exercise – suggesting it would take a year to re-run the TAAMs model with the new input data. FAA has provided no documentation for this claim other than its *ipse dixit* statement that it would take too long. Further, the FAA persists in making generic statements about the 2002 TAF for which it has no basis. For example, here is the time frame that FAA states full build OMP-Master Plan will hit the 15 minute AAAW limit under the 2002 TAF:

> "Using the aviation activity forecasts compiled for the DEIS, activity growth appears likely to result in delays reaching levels similar to those experienced today—between 13 and 16 minutes per operation—sometime in the mid-2020s. Should aviation activity grow faster than forecast—as the commenter asserts—delays would be likely to reach levels similar to those experienced today sooner. "
>
> U.4-526 (emphasis added)

While the quotation from the FEIS is supportive of the fact that Alternative C (full build OMP-Master Plan) will run out of capacity – even under the 2002 TAF – by the mid 2020s, thus requiring FAA to use a blended alternative with the full build OMP-

Master Plan even with the 2002 TAF, FAA provides no data or analysis to support this statement.

75. **The Manipulation of the 2004 TAF.** Even accepting arguendo the 2004 TAF as valid (which it is not), the 2004 TAF Forecast Demand shows the full build OMP-Master Plan running out of capacity by 2023 –requiring the use of the blended alternatives of demand management and other airports. But there are serious concerns about whether someone at FAA has manipulated the 2004 TAF downward so as to soften the impact of the Forecast Demand on the capacity and delay limitations of full build OMP-Master Plan, and to assess the reasonableness of staying with the 2002 TAF.

76. My firm and I specialize in aviation demand forecasting and we are very familiar with the methods used to prepare the Terminal Area Forecast (TAF). As stated by the FAA:

> "The TAF is prepared by FAA staff using industry-standard methodology—including statistical analysis of historical trends, review of recent trends in airline service, and assumptions regarding future airline developments."
>
> FEIS, B-3

> For large hub airports, TAF forecasts are based on a regression analysis of income and other local socio-economic variables.
>
> *Aviation Forecast Q and A*. FAA APP-400, 3-14-05

> "FAA disagrees with the comment [by Campbell-Hill] that the decrease in activity from the 2003 TAF to the 2004 TAF is unjustified. FAA conducts a comprehensive review of recent airline activity and future outlook for each annual TAF. This review is coordinated with a review of national aviation trends used in developing the forecast of aviation activity for the nation as a whole. In preparing the 2004 TAF, FAA determined that the long-term outlook for ORD was different from that reported in the 2003 TAF, and this is reflected in the results of the 2004 TAF. The FAA finds the commenter data for a few recent historical years unpersuasive on this issue. The assumptions regarding the future growth at ORD are based on the judgments of the FAA's forecast experts."
>
> FEIS, p. U.4-540 (emphasis added)

77. Given my personal professional familiarity with forecasting methodology and FAA's use of "regression analysis of income and other local socio-economic variables" in preparing the TAFs, I am perplexed by the unexplained and very large drop in forecast enplaned passengers from the 2003 TAF to the 2004 TAF. (see Exhibit E to this Affidavit) All of the "income and other local socio-economic variables" that would have been used for the 2004 TAF supported the use of higher growth rates — and thus higher enplanements in the 2004 TAF than the 2003 TAF.

78. As the Inspector General stated, FAA cannot rely on bald statements of self-proclaimed "expertise", without supporting evidence and calculation, to justify the huge drop in the 2004 TAF. Campbell-Hill has prepared a detailed review of the available data and economic variables comparing 2003 with 2004 (attached as Exhibit F). Based on that detailed data and analysis, it is clear that the 2004 TAF should have been higher than in the 2003 TAF — not substantially lower.

79. Further, on August 26, 2005 FAA purported — in response to Freedom of Information Requests that had been outstanding for several months — to produce the backup documents used by FAA in the preparation of the 2002, 2003, and 2004 TAF. The documents provided do not allow independent forecasting experts such as we have at Campbell-Hill to replicate or recreate the forecast values used by FAA in the 2004 TAF. There is simply no evidentiary basis for the FAA's 2004 TAF values.

80. However, the backup papers released by FAA on 2004 do confirm Campbell-Hill's opinion that FAA knew of and used significantly higher growth rates in the 2004 TAF working papers than the growth rates used in the 2003 TAF. There is simply no data or substantiation for the substantial decline in enplanements and operations between the 2003 TAF and the 2004 TAF.

81. Based on both Campbell-Hill's independent computations and analysis — using the same "industry standard" techniques as does the FAA— and on our examination of the backup documentation for the 2003 and 2004 TAF provided by the FAA on August

26, 2004 I conclude that a properly calculated 2004 TAF would have produced higher numbers of enplanements and operations in corresponding years than the 2003 TAF. Based on the narrative statement in Appendix R of the FEIS that the full build OMP-Master Plan would experience 13-16 minutes of delay in 2018 under the 2003 TAF Forecast Demand (and thus under FAA's 15 minute AAAW delay standard, be out of capacity in the 2018-2019 time frame), I conclude that under a properly revised 2004 TAF, the full build OMP-Master Plan would reach 1.4 million operations and thus be out of capacity (based on FAA's use of a 15 minute AAAW) several years before 2018. Further, if the lower delay levels used by FAA at other airports (*e.g.,* Philadelphia, Boston, Miami, Washington Dulles, and Denver) were used as the Level of Acceptable delay for O'Hare, the full build OMP-Master Plan would be out of capacity virtually on the day it opens

82. Further, the claimed delay savings as comparing existing O'Hare vs. the full build OMP-Master Plan are time limited and illusory for several reasons:

A. **Failure to Conduct FEIS TAAM modeling on the Existing Airport With FAA's Scheduling Order In Place.** FAA compares its model of "existing O'Hare" with OMP and states that existing O'Hare has experienced and will experience 15-17 minutes of delay in the future. However, FAA did not — in the TAAMs modeling done for the FEIS— model the delay performance of the existing O'Hare with the FAA's current scheduling order in place (*i.e.,* 88 arrivals per hour). FAA has not shown that the modeled TAAM values for this base case would be anywhere near 15-17 minutes AAAW. FAA has reported that its scheduling order requirements have led to a 27% drop in delays on a year to year basis. Further, should FAA decide that more delay reduction is desirable or necessary, FAA can simply adjust the demand management program currently in place. Nor can FAA fall back on a claim that reported ASPM values validate the TAAMs modeling and that ASPM values can be a proxy for modeling. As FAA has acknowledged the ASPM values are often predicated on bad weather conditions that are not represented in the TAAM model.

The result is that ASPM may report higher delay values than would an "apples to apples" comparison of modeled TAAM values for the existing airport with the scheduling order in place compared to full build OMP-Master Plan.

B. **The Claimed Delay Savings Disappear Rapidly.** The FEIS claims that the full build OMP-Master Plan will produce a major delay savings over the existing O'Hare — claiming a delay differential of 12.2 minutes in 2013 and 11.3 minute in 2018. But these so-called delay savings are predicated on the 2002 TAF. If one were to use the 2003 TAF or the 2004 TAF (adjusted or unadjusted) the delay savings would disappear as traffic rises and delays increase. FAA has failed to disclose the fact that delays will rise rapidly under the 2003 and 2004 TAFs wiping out the delay savings very rapidly.

C. **Failure to disclose the taxi time penalty in the FEIS.** In Chicago's submission of its benefit-cost analysis for its request for AIP "discretionary funding" Chicago discloses the fact that because the full build OMP-Master Plan will have runways much further out from the terminals than the existing runways, the full build OMP-Master Plan will have a penalty of added aircraft taxi time — as compared to the existing airport— of approximately 6.5 minutes per aircraft operation. When one applies the 2003 and 2004 TAF Forecast Demand with the taxi time penalty added, it appears that there will be little or no travel time savings from the day full build OMP-Master Plan opens.

83. **The Manipulation of the Acceptable Level of Delay**. Based on a review of the other airports cited by FAA and the statements about the acceptable level of delay made by FAA and DOT elsewhere, O'Hare is the only airport in the nation where FAA has used a 15 minute AAAW as the Acceptable Level Of Delay for determining the practical capacity of a proposed airport. The maximum number for Acceptable Level of Delay used at any other airport was 10 minutes AAAW. FAA's use of a 15 minute AAAW as the Acceptable Level of Delay dramatically overstates the capacity of the full build OMP-Master Plan and overstates the year in which the full build OMP-Master Plan runs out of capacity. Further,

FAA continues to refuse to disclose the bad weather or IFR delay values associated with a TAAM modeling of a 15 minute AAAW. The IFR average delay values associated with a 15 minute AAAW would likely be higher than an average of 70 minutes and would be incompatible with the operation of a hubbing airport. Here are the conditions described by the USDOT in its 1995 report on delays at O'Hare as to the effects of the highest levels of delays at hub airports:

> - ***8 to 10 minutes of delay per operation: increasing VFR delays in peak hours with translation to shoulder hours in all but optimum conditions; high delay in IFR with resulting flight cancellations. -***
>
> - ***Over 10 minutes of delay per operation: VFR operations experience increasing delays in peak periods and shoulder hours in all but optimum conditions; very high delays in IFR resulting in extensive flight cancellations.***
>
> ***
>
> …[W]hen the AAAW delay per operation reaches **6 minutes**, project planning, engineering and design of capacity improvements should be actively pursued. When AAAW delay reaches **eight minutes**, implementation of capacity improvements should be underway.
>
> 1995 DOT HDR Report, Technical Supplement # 3, page D-2 (emphasis added in bold underscore and italics)

FAA in the FEIS declines to describe the chaos that would exist in IFR average delay conditions at 15 minutes AAAW.

84. FAA's refusal to model and describe the IFR delay as the AAAW delay for the full build OMP-Master Plan climbs toward 15 minutes AAAW – 2023 under the uncorrected 2004 TAF — is highly questionable. One of the declared purposes of the OMP was supposedly to achieve a balance between VFR processing (and VFR delays) and IFR processing (and IFR delays). FAA has refused to model IFR delays at demand levels higher than 1.2 million operations and thus leaves hidden what are likely to be very high IFR average delays as the traffic climbs to the 1.4 million operations. Based on what we know

about the earlier Ricondo modeling at 1.3 million operations, IFR delays exceeded 40 minutes on average under some conditions (with a 10.9 minute AAAW). Extrapolating an IFR delay curve from FAA's stated IFR delay at 1.2 million operations, and Ricondo's IFR delay at 1.3 million operations, and FAA's "professional judgment" call for AAAW of 13-16 minutes AAAW at 1.4 million operations, it is clear that average IFR delays at 1.4 million operations could exceed 70 or more minutes. Clearly the full build OMP-Master Plan will not achieve the goal of balanced VFR and IFR delays.

85. **The Manipulation of the Time Period Of Analysis.** As discussed above the FAA initially made a multi-million dollar AIP planning grant to the City of Chicago in 2002 to conduct a study of the capacity and delay characteristics of the full build OMP-Master Plan and specified that the Time Period of Analysis should extend to the year 2030. In early March 2004 Chicago submitted an application for a $300 million AIP discretionary grant. The requirement to qualify for an AIP grant includes that: a) Chicago and the FAA must evaluate the full build OMP-Master Plan over a Time Period of Analysis from the opening of the project (2013) plus 20 years (to 2032) and b) that the FAA must evaluate alternatives to the proposed project within the framework of that 20 year Time Period of Analysis.

86. Despite this history, FAA in the FEIS states that FAA is only required to use a Time Period of Analysis that encompasses a "foreseeable time frame" — and FAA says that the foreseeable Time Period of Analysis is only five years from the opening of the project. However restricting the Time Period of Analysis to only five years from the start of the project is arbitrary and unreasonable because: a) using only a five year Time Period of Analysis provides misleading information about the impacts of the project, including the failure to disclose facts that the full build OMP-Master Plan will run out of capacity and that delay savings will disappear and b) using only a five year Time Period of Analysis hides the reality that FAA will necessarily have to employ a blended alternative (*i.e.*, demand management plus use of other airports) even with the full build OMP-Master Plan. FAA's

claim that use of a longer Time Period of Analysis would "not be credible" is disingenuous, arbitrary, and irrational. Not only did FAA fund a 2030 Time Period of Analysis in its 2002 planning grant, but the FAA's evaluation and decision on Chicago's application for an AIP discretionary grant requires FAA to evaluate both the proposed full build OMP-Master Plan and alternatives over a Time Period of Analysis from the opening of the project (2013) to 2032. Finally, it is common in large public works projects to evaluate the proposed project and alternatives to the project over a significantly longer period than five years — typically 20 years.

X. There are several feasible alternatives which would avoid the destruction of the homes, businesses and parklands in Bensenville and Elk Grove Village and avoid the destruction of St. Johannes Religious Cemetery

87. As discussed above, central to FAA's selection of Alternative C (full build OMP-Master Plan) — and the rejection of lesser development alternatives which would avoid the destruction of the homes, businesses and parklands in Bensenville and Elk Grove Village and avoid the destruction of St. Johannes Religious Cemetery — were the FAA assertions that:

A. Only Alternative C, D, and G could meet unconstrained forecast demand at the airport and that only alternatives that could meet forecast demand would be considered.

B. That Alternative C produced greater delay reductions than any of the other alternatives.

C. That FAA had no "authority" to force airlines to use other airports and thus no authority to implement a "blended alternative" (*i.e.*, use of some lesser level of development at O'Hare in combination with demand management and use of other airports.)

88. Ignored by the FAA was the uncontestable fact that full build OMP-Master Plan simply cannot be financed (see discussion above). As the Inspector General has said without reliable and secure financial resources to build the full build OMP-Master Plan,

FAA will be compelled by necessity to employ a blended alternative at O'Hare. As discussed below, once the need for a blended alternative is recognized, there are several blended alternatives which would address delays, address the need to handle future traffic, and avoid the destruction of the homes, businesses and parklands in Bensenville and Elk Grove Village and avoid the destruction of St. Johannes Religious Cemetery.

89. However, I have conducted my alternatives analysis accepting *arguendo* the FAA's unfounded assumption that somehow the $14.29 billion (and all the other unquantified costs described above) are somehow magically available. Putting the lack of financial feasibility aside, I have examined the first two of the FAA's central assertions (ability to accommodate unconstrained demand and larger reduction in delays) and found them to be without merit.

90. In the FEIS FAA has examined a number of alternatives which combine lesser levels of development at O'Hare and demand (or congestion) management with use of other airports. These are what FAA calls "Derivatives" and I call alternatives H through N and they are listed at page 3-62 of the FEIS:

- **Derivative H** – No Action with Use of Other Airports and Congestion Management (Average Annual Delay of 9.3 Minutes per Operation)
- **Derivative I** – No Action with Use of Other Airports and Congestion Management (Average Annual Delay consistent with NPRM Modeled Delay)
- **Derivative J** - No Action with Use of Other Airports and Congestion Management (Average Annual Delay 4, 6, 8 Minutes per Operation or other FAA Level)
- **Derivative K** – OMP Phase I (Original Alt. B) along with Use of Other Airports and Congestion Management
- **Derivative L1** –Refinement of Alternative B, with the Northernmost Runway moved to a southern position.
- **Derivative L2** – Refinement of Alternative B, with the Northernmost Runway moved to the south, and the new Runway 10C moved to the north.
- **Derivative M** – No Action with a New South Runway only (4300' south from existing Runway 9R/27L)
- **Derivative N** - No Action with a New South Runway only (5000' south from existing Runway 9R/27L)

91. Alternatives H, I, and J are alternatives that use the existing airport and employ the same kind of congestion management that is in use by FAA today at O'Hare through its scheduling order and is used elsewhere in the country at LaGuardia and Reagan National. Under congestion or demand management, the FAA simply assesses the level of delay that is desirable and establishes operational requirements (*e.g.,* a limit of 88 arrivals per hour at O'Hare) that will produce the standard of acceptable delay. Alternatives H, I, and J are without question feasible because they employ the existing airport and there no questions of technical feasibility associated with those alternatives. These alternatives (which are "blended alternatives") were rejected by FAA because: a) they did not "serve forecast demand" and b) because they would allegedly yield less delay reduction than would full build OMP-Master Plan.

92. Alternatives L1, L2, and M and N would also likely require demand management and the level of delay they experienced would depend on what level of delay FAA deemed acceptable, be it the same delay as in the current scheduling order or a different level of desired delay.

93. Further, despite a lengthy technical discussion of L1 and L2 FAA concludes that each of these alternatives are "potentially feasible" (FEIS at 3-68). However, these two alternatives are also rejected because they would yield less delay savings than FAA's Alternative B (Phase One) which FAA has also stated would not meet the unconstrained demand and would have delay saving less than full build OMP-Master Plan. (Id at 3-68 to 3-69)

94. Similarly FAA concluded that Alternatives M and N, were "potentially feasible" (FEIS at 3-73). However according to FAA these alternatives would not meet the "purpose and need" presumably because they did not have the capacity to serve unconstrained forecast demand and because according to FAA, they would produce less delay savings than full build OMP-Master Plan.

95. The fallacy in FAA's cavalier rejection of these alternatives is demonstrated by the fact that FAA's preferred alternative (FAA's Alternative C – the full build OMP-Master Plan) will not meet purpose and need even if it could be funded. Based on the uncorrected 2004 TAF the full build OMP-Master Plan will run out of capacity by 2023 — requiring FAA to utilize a "blended alternative" (*i.e.,* demand management and the use of other airports) with the full build OMP-Master Plan. Use of a corrected 2004 TAF (to address the strange unexplained anomalies in the creation of that TAF to reflect the higher economic growth rate that should have produced higher operations and enplanements than 2003) results in full build OMP-Master Plan running out of capacity no later than 2019 and probably earlier.

96. Similarly, as FAA has acknowledged, delays will mount under full build OMP-Master Plan and again based on the 2004 TAF any delay savings between the approximately 17 minutes of delay FAA claims for the existing airfield and the 5.2 to 5.8 minutes of AAAW delay that FAA asserts for the full build OMP-Master Plan will be exhausted by 2023 under the uncorrected 2004 TAF and by 2019 under the corrected 2004 TAF.

97. Moreover, these dates and delay differentials do not take into account the approximately 6.5 minute additional taxi time penalty which the full build OMP-Master Plan must bear because of the extended outboard runways of the full build OMP-Master Plan as compared to existing O'Hare. Putting that 6.5 minute penalty into the analysis shows that under the 2004 TAF the full build OMP-Master Plan will have no travel time benefit over the FAA asserted 17 minute existing airfield in 2019 and even earlier if a corrected 2004 TAF is used.

98. It is clear from these facts that:

A. The full build OMP-Master Plan does not meet and cannot meet unconstrained demand.

B. To address unconstrained 2004 TAF demand, FAA will be required to use a blended alternative (*i.e.,* congestion management and other airports) in combination with full build OMP-Master Plan. Once the need for a blended alternative is acknowledged, FAA has acknowledged that other blended alternatives — *e.g.,* Alternatives H, I, J, M, and N are feasible. Indeed, FAA has asserted that Alternative K (Phase One) would require a blended alternative.

C. Any so-called "delay savings" associated with full build OMP-Master Plan — as compared to FAA's asserted 17 minute delay at existing O'Hare will be rapidly exhausted and within a few years after it opens, full build OMP-Master Plan will not have any delay savings advantage over the FAA's asserted 17 minute delay at existing O'Hare.

99. Further, these facts make clear that several of the alternatives put forward in Alternatives H, I, J, L1 and L2 and M and N – all of which would employ demand management — would have superior delay performance over full build OMP-Master Plan without demand management. For example,

Alternative	Level of delay per operation
Full build OMP-Master Plan in 2023 at 15 minutes AAAW delay plus 6.5 minutes taxi delay — without demand management	21.5 minutes
Derivative H – No Action with Use of Other Airports and Congestion Management (Average Annual Delay of 9.3 Minutes per Operation)	9.3 minutes
Derivative I – No Action with Use of Other Airports and Congestion Management (Average Annual Delay consistent with NPRM Modeled Delay)	**[unknown]** FAA has not run TAAMs model on FAA Scheduled Order delays
Derivative J - No Action with Use of Other Airports and Congestion Management (Average Annual Delay 4, 6, 8 Minutes per Operation or other FAA Level)	4, 6, or 8 minutes as selected by FAA

100. Alternatives L1 and L2 and M and N, and even Phase One would have similar levels of delay performance at similar levels of delay selected by FAA under demand management.

101. In summary there are several alternatives which would avoid the need to destroy the homes, businesses, park lands in Bensenville and Elk Grove and the destruction of St. Johannes Cemetery. These alternatives would be blended alternatives just as FAA will be required to use blended alternatives with full build OMP-Master Plan when it runs out of capacity shortly after it opens.

XI. FAA's Claim of Lack of Authority to Implement a Blended Alternative is Without Merit.

102. FAA claims in that it cannot implement a blended alternative — *i.e.*, congestion management and the use of other airports in conjunction with various levels of development at O'Hare because FAA cannot compel the use of other airports. As stated by the FAA:

> A significant component of the Blended Alternative is the use of other airports. The use of other airports is driven by the market and cannot be directed by the FAA. In a deregulated domestic aviation industry, the Federal government does not control where, when, and how airlines provide their services; nor is the Federal government the driving force in airport capacity development or airport utilization. Rather, the aviation industry, in partnership with local and regional government, in response to market demand, drives where and how air travel is accommodated.
>
> FEIS p. 3-42 (emphasis added)
>
> Under present law, the federal government cannot prescribe controls affecting the rates, routes, or services governing commercial aviation. Similarly FAA cannot require a change in the passenger distribution pattern of other modes of transportation.
>
> ID (emphasis added)

103. FAA has set up a legal 'straw man" argument here that suggests that use of a "blended" alternative somehow requires FAA to issue an order "directing" or "compelling" airlines to use certain airports. On the contrary, we are not advocates of FAA orders "directing" the airlines to use other airports. Moreover, nothing in the Blended Alternative evaluation requires the issuance of such an order.

104. The entire evaluation of blended alternatives — and the implementation of blended alternatives — can be undertaken within the framework of existing FAA authority involving the power of the pen and the power of the purse. As stated by the FAA in its recent Record of Decision for Logan Airport where the FAA ordered Massport to develop a demand management program:

> "While FAA does not have the authority to control or direct the actions and decisions of Massport relative to planning for Logan airport, FAA does have the authority to withhold project approval, including federal funding and the other federal actions discussed in this ROD."
>
> ROD p 6 (emphasis added)
>
> "The EIS and MITRE findings not only point to the long-term significance of the runway [a proposed 5000 foot RJ runway] in reducing delays, but also indicate that demand management needs to be considered as a viable long-term measure."
>
> Id at p. 12 (emphasis added)
>
> "This requirement to develop and submit a detailed plan [for demand management] is a condition of the ROD and if Massport does not fulfill this requirement, the FAA is entitled to use a full range of legal options to compel Massport to fulfill this requirement."
>
> Id, ROD Part 2 at p. 16 (emphasis added)

105. Indeed, a blended alternative is currently in place at O'Hare today as a result of the FAA Scheduling Order. FAA has observed that as a necessary consequence of demand management at O'Hare, the airlines will use other hub airports to accommodate the excess unsatisfied demand to accommodate transfer passengers. As stated by the FAA in its *Preliminary Regulatory Evaluation* (March 1, 2005) to support the FAA's proposed scheduling order in its March 2005 Notice of Proposed Rulemaking:

> "..[T]he hubbing carriers have many alternatives to reroute passengers
>
> Id at 38
>
> "With a large share of the passengers on connecting flights, hub carriers such as United and American would have many alternatives to reroute their passengers to their final destination…We believe that hub carriers could retain the connecting passengers on the remaining flights through alternative hub airports.
>
> Id at 41.

106. These comments by FAA in its NPRM proceeding reflect the exact reasoning contained in a 1996 letter by executives from United and American stating that American and United have great flexibility in moving transfer traffic between hubs. FAA dismisses the letter a "dated"(without any basis for FAA's conclusion) but the operational flexibility reflected in that letter is the same as the flexibility addressed in the March 1, 2005 FAA report. There is nothing "dated" about the facts or the logic of the 1996 letter by executives from United and American.

107. As Campbell-Hill pointed out in our earlier filings with FAA in this matter, FAA can use either its grant power (and the related imposition of conditions on the grant as per the Boston Logan example) or the regulatory power through mechanisms such as the scheduling limitations currently in use at O'Hare, LaGuardia, and elsewhere. In our earlier filings with FAA we pointed out that the recent Record of decision in Los Angeles calls for and approves a blended alternative for LAX in which less than all of the unconstrained demand will be accommodated at LAX. The physical limitations at LAX will have the necessary effect of moving flights that would otherwise use LAX to other airports.

108. Similarly the communities and the Religious Objectors have pointed out that Chicago implemented and FAA approved a Record of Decision in 1984 for O'Hare that expressly rejected an alternative (new runways) that would be needed to carry the "unconstrained" demand and instead opted for an alternative development at O'Hare that would carry that traffic which could be carried by the exiting runways with the use of other hub airports for the excess demand. O'Hare has been using a "blended alternative" with FAA's approval since 1984.

XII. Compelling Governmental Need and Availability of Alternatives To Avoid Destruction of St. Johannes Religious Cemetery

109. I have been asked if I am aware of any facts which are relevant to the questions of:

A. Whether there is a compelling governmental need for O'Hare to accommodate all of the transfer traffic which United and American wish to route through O'Hare.

B. If there is such a compelling governmental need, are there alternatives to meet that need which would avoid destruction of St. Johannes Cemetery.

110. There is no compelling governmental need to force all of the transfer traffic that United and American wish to push through O'Hare into an expanded O'Hare (in accordance with the FAA forecast). It is important to emphasize that — as pointed out by the executives of United and American in their 1996 letter— the existing O'Hare has enormous reserves of capacity for local "origin-destination" passengers for decades into the future.

111. The delay and capacity crunch comes when United and American make private economic decisions for what they perceive to be their private competitive economic advantage to move transfer traffic (traffic that never sets foot outside the airport) between their various hubs (Denver, Dulles, and O'Hare for United; Dallas and O'Hare for American).

112. In my opinion the decision to push transfer traffic into O'Hare to the point that delays rise to pressure for the destruction of a religious cemetery is essentially a private economic decision which does not fill any compelling national or compelling local governmental need.

113. Even if some compelling governmental need was identified, full build OMP-Master Plan does not satisfy that need and there are (as discussed above) several alternatives by which the airlines using O'Hare can use other options to service their transfer passenger needs without destroying St. Johannes Cemetery. As discussed above, any so called "delay savings" made by destroying the religious cemetery will be short lived and there are less destructive alternatives that have equal or greater delay savings. Similarly, as FAA has acknowledged in its scheduling order documents, United and American have several

alternatives to route their excess transfer passengers without destroying the religious cemetery.

XIII. FAA's Baseless Assertions

114. FAA in late July released several hundred pages of detailed and somewhat disorganized comments on Campbell-Hill's earlier reports. We have not had the time to go through and respond to all of these comments in the time frame provided by FAA for response — September 6, 2005. By not responding to each comment, I do not mean to create the implication that we agree with each FAA comment. Nevertheless, given the shortness of time, I feel compelled to address some of the most serious errors in the FAA comments.

XIV. USE OF OTHER MID-CONTINENT AIRPORTS

115. As Campbell-Hill reported in its earlier filings with FAA, FAA performed no analysis of the potential use of other hubs to satisfy growth projected for O'Hare's connecting traffic. There are many hub airports that have sufficient available capacity and the FAA has the authority to exercise congestion management measures that would encourage airlines to use other airports. Also, its funding decisions (the power of the purse) influence airline scheduling decisions over their route network as well as their marketing and pricing strategies (C-H April 6, 2005 Report, pages 70-74).

116. **FAA Assertion.** FAA agrees that there is idle capacity at other mid-continent hubs, but it argues that it has no statutory authority to force a shift to other hubs. The FAA states that O'Hare is unique because of its "significant origin-destination traffic, historical function as a connecting hub, and one of the most important international gateways."(Comment 129) Since O'Hare is so unique, it is unlikely that the major airlines at ORD will be able to successfully use other mid-continent airports. The FAA also attacks Campbell-Hill using the term "mid-continent" to describe airports such as Atlanta,

Charlotte, Newark, Dulles, Philadelphia, and Pittsburgh. The FAA also says that a report called, The National Impact of Civil Aviation, co-authored by Campbell-Hill in 2002 lists some of the airports in this report that have additional capacity as airports that need capacity improvement (Comments 129, 130, and 131).

117. **Campbell-Hill Response.** Campbell-Hill's report explained that the FAA has implemented congestion management schemes that have had the effect of shifting traffic to other airports. Campbell-Hill never suggested that the FAA has the authority to force airlines to use certain airports. Campbell-Hill's point is that if congestion management is in place, airlines are likely to use other connecting hubs that have sufficient available capacity. This way the marketplace (individual airline decision-makers) decides how it wants to utilize a constrained (not unlimited) resource.

118. Also, the uniqueness of ORD will not deter airlines from shifting some connecting traffic to other airports. In fact, many of the airports that Campbell-Hill mentioned as competing hubs have high yields for connecting passengers and high load factors. The yields for passengers connecting over MEM, CLT, STL, DTW, PIT, ATL, IAH, CVG, and MSP are all higher than the yield of passengers connecting over ORD. Airlines are more likely to care about yields at other hubs than ORD's "historical function as a connecting hub."

119. The fact that some competing hubs that Campbell-Hill mentioned do not have a true "mid-continent" location is irrelevant. Regardless of their location, these are hubs that airlines could use to connect passengers instead of using ORD, and they are all hubs that compete with O'Hare today for connecting traffic.

120. The airports listed in Campbell-Hill's 2002 study entitled The National Impact of Civil Aviation were the airports with planned infrastructure improvements based on FAA sources. Campbell-Hill made no assessment of the economic merits of any of the programs referred to in the report. Just because some of the airports have planned capacity improvements does not mean that they are currently out of capacity, or that they pass a

rigorous benefit/cost test. In the situation of O'Hare's OMP, the costs outweigh the potential small and short-lived delay benefits, while at the same time increasing access times and terminal facilitation times.

121. **FAA Assertion.** In Chapter 3 of the EIS, the FAA intuitively considered the use of other mid-continent hubs as an alternative to relieving congestion and addressing future demand at O'Hare (Comment 129)

122. **Campbell-Hill Response.** As Campbell-Hill stated in its report, the FAA's entire treatment of the use of mid-continent hubs is contained in two pages. The FAA irresponsibly dismissed this alternative by arguing that it does not have the authority to mandate the use of other airports. As Campbell-Hill has shown, the FAA has a history of using congestion management measures that have had the effect of shifting traffic to other airports. The FAA moved its mention of mid-continent airports from obscurity in Appendix C of the DEIS to Chapter 3 in the FEIS. It is clear the FAA did this because putting it in the appendix, which is supposed to have details of the FAA's analysis, highlights the fact that the FAA dismissed the potential use of other mid-continent hubs without performing any analysis at all. It still has performed no analysis, but relies solely on biased opinion and conjecture. FAA cannot blindly rely on self-declared unsubstantiated "expertise", without evidence or logic to support its assertions.

XV. ORD As An International Gateway

123. Campbell-Hill in its earlier comments to FAA pointed out that even with a shift of some transfer traffic to other hubs, O'Hare's origin-destination ratio would still be comparable to other international hubs.

124. If a portion of ORD's connecting passengers was shifted to other mid-continent hubs, ORD's local to connecting ratio would increase to 61:39 by 2018. This is similar to many international gateways including JFK, LAX and SFO. Therefore, it is

reasonable to conclude that O'Hare would continue as a major international gateway (C-H Report, page 71 and 73)

125. **FAA Assertion.** FAA asserts that the other gateways cited by Campbell-Hill are not relevant because they are not "inland" gateways. FAA asserts that of the airports listed in Exhibit 400, ATL is most similar to ORD because it is a major inland international gateway. ATL has a larger connecting share than ORD today. This indicates that a large connecting share is required to support an international gateway at an inland airport (Comments 130 and 132).

126. **Campbell-Hill Response.** This claim by FAA is simply a *non sequitur* with no logical or empirical basis. ATL is not an inland gateway. It is 240 miles from the Atlantic coast and it is less inland than Dallas, which is 340 miles from Mexico. O'Hare is only 250 miles from Canada. ATL is not in any way an inland point.

127. The fact that ATL has a larger share of connecting passengers does not support the conclusion that a connecting share larger than 39% is needed at ORD for it to operate as an international gateway. The Atlanta local/connecting ratio simply demonstrates that it is a much smaller local O&D market than Chicago (27.9 million vs. 42.8 million), which is supported by a much smaller population (5.0 million vs. 9.6 million). Another reason for ATL's local/connecting ratio is that because of geography and history it is Delta's largest system hub. Due to the factors discussed above, the math simply produces a comparatively low local/connecting ratio for ATL

128. Toronto Pearson Airport is a major inland international gateway and it has a connecting share of only 25%. Over 50% of all Toronto departures are international and one in four departures is operated by a foreign carrier. The Toronto metro area population is slightly larger than the Atlanta metro area population (5.3 million vs. 5.0 million). Toronto belies the FAA's contrived theory for basing it entire response on Atlanta.

XVI. LAX EIS ISSUES

129. Campbell-Hill in its earlier comments to FAA pointed out that FAA's work in the LAX EIS was more sensible and responsible because it truly focused on a balanced regional approach that uses a "blended alternative of LAX in combination with other airports The ORD EIS on the other hand focuses only on the use of ORD for accommodating future increases in traffic demand.

130. **FAA Assertion.** FAA claims that The LAX EIS is not comparable to the ORD EIS because…"1. The airport systems in the Los Angeles region and the Chicago region are different; 2. The roles of LAX and ORD are different; and 3. The sponsor requests in each case are different." (Comment 138) The wide geographic spread of the Los Angeles region makes it easier for regional airports to serve regional demand. Chicago is not as densely populated. Also, ORD is different because it is more of a connecting hub than LAX. "ORD competes with other hubs such as DEN and DFW for connecting traffic, both domestic and international. Without a substantial critical mass of air service at ORD, the connecting hub airlines serving ORD would not be competitive in terms of frequency of connections and the availability of attractive fares." (Comment 138) The FAA also stated that because ORD serves as a major international gateway and connecting hub it is not practical to assume that flights will be spread to other airports, despite available capacity (Comment 138).

131. **Campbell-Hill Response.** The geographical spread of a population should not effect the FAA's consideration of alternatives that benefit the people of a whole region, instead of just one airport. Indeed, FAA is pursuing the same kind of regional approach in the Northeast (using multiple airports to address Boston Logan's excess long term demand) as is the FAA in the Los Angeles Metropolitan Area.

132. The FAA also argues that each airport is different and therefore it should not be held to a consistent set of standards or guidelines in its analysis. This is both wrong and irresponsible.

133. Campbell-Hill agrees that airlines use DEN and DFW to connect passengers instead of using O'Hare. ORD also competes with STL, HOU, ATL, KCI, PIT, CVG, CLT, DTW, IAH, MSP, SLC, and others for domestic traffic; and with SFO, LAX, DFW, IAH, ATL, EWR, JFK, IAD, BOS, YYZ, and others for international traffic. Campbell-Hill discussed this in Chapter 4 of its April 6 report. The FAA never quantifies or offers an opinion on how many connecting passengers, flights, or breadth of services comprise the "critical mass" necessary for ORD hub carriers to compete with hub carriers at other airports (some of which are the same). As shown in Campbell-Hill's analysis, even shifting all future unconstrained passengers that cannot be accommodated under a constrained ORD to other connecting hubs produces more connecting passengers at ORD than ORD has today (Exhibit 403). ORD's hub viability would not be diminished. In fact, the FAA offers no analysis whatsoever to demonstrate that a reduction in ORD's connecting ratio (not absolute numbers of passengers) will weaken its service pattern or competitive viability.

134. Furthermore, ORD could serve as a major international gateway, even it was considerably smaller than it is today. JFK, which is significantly smaller than ORD in terms of both roundtrip domestic O&D (8.1 million vs. 13.1 million) and total enplanements (18.6 million vs. 36.0 million), has 73% more international enplanements (8.6 million vs. 5.0 million) and 76% more roundtrip international O&D (2.8 million vs. 1.6 million) than ORD.

135. Finally, the request of the sponsor should not affect whether the FAA adequately and responsibly evaluates alternatives, assesses financial feasibility, and determines environmental impacts. The FAA performed no analysis to support the claim by the City that… "it would be necessary to increase capacity at O'Hare to meet regional demand needs."(Comment 138). The illogic of this statement is emphasized by the facts a) that Chicago cannot assemble the financing for full build OMP-Master Plan and that b) full build OMP-Master Plan falls far short of meeting regional demand and c) that FAA has not challenged the assertion by the impacted communities that far more capacity can be built at far less cost at other locations in the metropolitan Chicago region. FAA's failure to take a

regional approach in the Chicago metropolitan region — as contrasted with the regional multi airport approach taken by FAA in the Los Angeles and Boston — is simply irrational. Indeed, FAA's failure to examine regional demand and the impact of that demand on the capacity shortcomings of full build OMP-Master Plan is heightened by the FAA's statement that Midway will soon be out of capacity. FAA's FEIS ignores the impact of Midway's unmet demand growth on the full build OMP-Master Plan proposal.

XVII. Chances of a Fourth Airport Accommodating Regional Demand

136. **FAA Assertion** "There is no current example in the United States for a region to be served by more than three airports each with a significant (10 percent of greater) market share. From this data, it is not reasonable to conclude that the Chicago area could be served by more than three airports, with each having 10 percent or more of the regional demand." (3-20)

137. **Campbell-Hill Response.** : The FAA has no basis for this comment. Chicago is the third largest air travel market in the U.S. As traffic grows in large markets like Chicago it is likely that existing airports will run out of capacity and alternative airports will be needed and could actually have four airports with more than 10 percent of the regional traffic. The reason that no market has more than 3 airports with more than 10 percent of the regional traffic could simply be because no market is currently large enough. Moreover, the choice of a self-serving hypothetical criterion like "10 percent" is of no significance. The fact is that multiple-airport hub regions like Los Angeles, San Francisco, Washington/Baltimore, New York, and Chicago do support multiple numbers of growing airports. In fact, the Los Angeles region supports five significant air carrier airports.

XVIII Capitalized Interest Issues

138. **FAA Assertion.** FAA asserts that Capitalized Interest should not be added into the capital costs of the project because it is a financing cost. To add it in would be

double counting since the FAA considered capitalized interest in its financing plan (Comments 96 and 97).

139. **Campbell-Hill Response.** Throughout this discussion and in Section 3.0 of Campbell-Hill's report dated April 6, 2005, the term "capitalized interest" refers to interest paid on construction related loans during the period of construction and prior to project completion. Campbell-Hill has stated that capitalized interest is a project capital cost and should be incorporated as part of the total capital cost considered by the FAA in its assessment of financial feasibility and financeability (C-H Report, page 55).

140. Capitalized interest is part of the cost of acquiring an asset and bringing it available for use, and therefore, is a project capital cost. The capitalization of interest cost only occurs during the construction period. After this, the interest is treated as an operating expense. The Financial Accounting Standards Board (FASB) policy does not treat capitalized interest as an interest expense on debt, but adds the amount of capitalized interest to the cost of the asset in question. From an accounting perspective, capitalized interest is treated the same as concrete used to build a runway. The following quotations from an FASB policy document explain the proper treatment of capitalized interest:

> "The historical cost of acquiring an asset includes the costs necessarily incurred to bring it to the condition and location necessary for its intended use. If an asset requires a period of time in which to carry out the activities necessary to bring it to that condition and location, the interest cost incurred during that period as a result of expenditures for the asset is a part of the historical **cost of acquiring the asset**.[3]" (emphasis supplied)
>
> "The objectives of capitalizing interest are (a) to obtain a measure of acquisition cost that more closely reflects the enterprise's total investment in the asset and (b) to charge a cost **that relates to the acquisition of a resource that will benefit future periods against the revenues of the periods benefited**. "(emphasis supplied)

[3] Financial Accounting Standards Board, Statement of Financial Accounting Standards No. 34: Capitalization of Interest Cost, page 5, October 1979.

> "On the premise that the historical cost of acquiring an asset should include all costs necessarily incurred to bring it to the condition and location necessary for its intended use, the Board concluded that, in principle, **the cost incurred in financing expenditures for an asset during a required construction or development period is itself a part of the asset's historical acquisition cost.** " (emphasis supplied)

141. Using the term capitalized interest infers that the interest is a capital cost. Capitalization is defined as…"the process of accumulating cost in an asset account until the item is used to produce revenue." Simply using the term "capitalized interest" implies that this interest cost is part of the cost of an asset, not merely a financing cost.

142. Another important point is that if the cost of interest incurred during construction is not added to the project cost, it is not in the airline rates and charges base, and therefore, it will never be paid by the airlines. While the FAA admits on page U.4-563 that its own policy prohibits an airport from assessing interest expense on construction loans prior to a project's completion, it naively goes on to say, however, that nothing would preclude such charges if the airlines agreed to it in their rates and charges agreement. This weak response is without merit as the FAA did not provide a single example of an airport where the airlines willingly pay for construction loan interest (during construction) out of the goodness of their hearts. If this interest cost is not capitalized, the airport cannot recover it through future rates and charges.

143. Campbell-Hill's treatment of capitalized interest does not double count any expenditures. Campbell-Hill correctly divided the interest into two pools: (1) payments during project construction, and (2) payments after project completion. The payments required to be made during construction were "capitalized," that is, they were added to the capital cost of the project itself. The payments made after the project is completed and available for use were treated by Campbell-Hill as ordinary interest "expense" (a financing cost). This is consistent with FASB accounting standards.

144. In the FAA's tortured effort to minimize the total "capital" cost of the OMP it argues against a well-established accounting principal and asserts that interest expense during construction should not be capitalized (for unstated reasons) and therefore it is not a relevant cost for feasibility or benefit/cost analysis purposes. The City and the FAA attempt to invent new accounting conventions in their efforts to minimize the true OMP capital costs.

145. Campbell-Hill's analysis does not double count anything because the City never included interest cost during construction in its capital cost base any more than it included a portion of Mayor Daley's salary. The FAA's logic is totally flawed; its research of the City's cost figures leads to false conclusions or assumptions, and it demonstrates a complete ignorance of generally accepted accounting principles and standards.

146. **FAA Assertion**. Capitalized interest does not accumulate on PFC bonds because the City is receiving PFC revenue even during the construction period (Comments 97 and 107).

147. **Campbell-Hill Response.** The forecast PFC revenue will not be sufficient to cover the PFC-backed debt and Pay As You Go financing in the City's financing plan. During the construction period, this PFC shortfall will have to be funded by issuing GARBs because the airlines do not pay until the runways/terminals are available for their use. The interest on these additional GARBs during the construction period must be capitalized and added to the total construction cost (C-H Report, pages 55 and 58).

148. Campbell-Hill never calculated capitalized interest on PFC-backed bonds. As described above, the capitalized interest was calculated for the GARBs that would be issued to pay for the shortfall in PFC revenue. Campbell-Hill's analysis is correct.

I declare under penalty of perjury that the foregoing is true and correct.

Brian M. Campbell

SUBSCRIBED and SWORN TO before
me this 6th day of September, 2005

Kathy A. Fedarko
Notary Public

My commission expires 8/31/2007

ANALYSIS AND RESPONSE TO COMMENTS PRESENTED

IN THE AFFIDAVIT OF BRIAN CAMPBELL

This affidavit was part of a package of comments submitted to the FAA in response to the agency's invitation for public comments on portions of the Final Environmental Impact Statement and the FAA's proposed resolution of religious liberty issues. As with Mr. Fleming's affidavit, the FAA's analysis of his comments will track his affidavit, and will indicate our specific response to his assertions through our adoption of the same paragraph numbering convention used by Mr. Campbell. Some assertions require no FAA comment or notation of the commenter's opinion as they are restatements of comments from Campbell-Hill's previous submittals to the FAA. To the extent that other comments contained in this document are more properly directed to that component of the FAA which is considering the application by the City of Chicago for a Letter of Intent and federal funding, the Agency believes it would be inappropriate to engage with the commenter on these issues in this document. Instead, it has forwarded to the appropriate FAA office, a copy of this affidavit. The review of the LOI, including the Benefit Cost Analysis (BCA), is a separate process from this NEPA evaluation.

The Campbell affidavit deals primarily with two overarching issues that the FAA feels compelled to answer in the following narrative fashion. The Campbell issues are as follows:

- The overall costs of full build OMP are so great that the project will never be completed in its entirety and will likely conclude with Phase One. Therefore, the EIS misstates the environmental impacts and consequences of the actions; and
- The initial $300 Million Letter of Intent (LOI) request is critical to the successful funding of the project and yet the approval of the LOI is uncertain. Therefore, the FAA needs to assure the financing up-front to prevent residential areas and cemeteries from needlessly being destroyed.

In response, the FAA notes that the Agency has conducted a review of the City's financing plan for the OMP and has summarized the findings of that review in Section 1.7 of the Final EIS. Section 1.7 stated,

> On the basis of the information presented herein, the review of the City's financial plan, and an understanding of airport financing in general, FAA has no reason to believe that the City's financial plan cannot be implemented as generally presented in the ORD Master Plan. Further, FAA has no reason to believe that the resulting costs to airport users (most significantly, major airlines serving O'Hare) will significantly adversely affect the ability to finance the capital projects and realize the projected aviation demand, particularly in the context of future investments that will be required at other large hub airports in the United States. All projections and forecasts are subject to uncertainty, and future events may result in changes or adjustments to the FAA conclusions.

> For purposes of satisfying the FAA's obligations under NEPA, FAA has concluded that it is reasonable to assume that, based upon the impact O'Hare has on the Chicago region, as well as the NAS, and the benefits to the regional economy, there will be sufficient funds to complete the City's proposal, if approved. Further, in response to comments on the Draft EIS, FAA has reviewed additional cost-related information applicable to the project. For purposes of this review under NEPA, the FAA has concluded that the estimated costs of the project are reasonable. In addition, FAA believes that with a project of this magnitude and importance, the availability of projected funding sources is sufficiently reasonable and capable of being obtained. Accordingly, the FAA has decided it is both appropriate and necessary under NEPA to subject the Sponsor's full build proposal and alternatives thereto to this environmental analysis because the entirety of the proposed action is reasonably foreseeable. This determination is made without prejudice to evaluation of the City's pending Letter of Intent request, which is a separate process from this environmental analysis.

While this text from the Final EIS indicates that the review of the financing plan was done from the NEPA perspective, the FAA also notes that the review of the Letter of Intent request is currently underway. Mindful of this ongoing LOI review, the FAA team responsible for the work involved in the NEPA review have coordinated with the FAA LOI review team and are satisfied that the LOI including a benefit-cost analysis reasonably reflect the determinations made above regarding the financing plan for the OMP. It is noted that Campbell-Hill has provided comments on the City's BCA portion of their LOI, which will be considered as part of the separate LOI administrative process.

With regard to the need for the FAA to make all funding decisions simultaneously with the issuance of this ROD, the Agency notes that this is impractical and inconsistent with typical practice. To the extent that the commenter is asserting that FAA environmental approvals are inadequate unless and until the sponsor has arranged all funding with exact certainty for the entire project, the FAA would point out again that this logic is at odds with normal professional practice and regulation. The Agency is not aware of any public improvement project of this size or scope where financing and funding have been locked in at this point for the entire project.

With any large, long-term capital program, there is some uncertainty regarding the sources of funds that have been assumed to provide for full implementation. Estimates and projections of funding sources are necessarily utilized in developing capital program financing plans, but actual developments can differ from original assumptions, and these actual developments can be both positive and negative with regards to the availability of funds. As a result, airport operators are routinely required to refine financing plans during the implementation of a capital program, making adjustments to take into account actual developments as they occur.

In the case of the OMP, there have been questions raised regarding the potential availability of assumed federal grants and PFC funds, as well as the sensitivity of the finance plan to external factors such as airline bankruptcy and/or reduced traffic levels. FAA has reviewed the City's overall finance plan for OMP for NEPA purposes, and believes it is based on reasonable assumptions. However, in the event that some of the project funds are not available in the

amounts assumed or at the times assumed, the City would need to make adjustments during implementation.

Therefore, the FAA conducted a sensitivity analysis of the OMP financing plan. This sensitivity analysis examined a number of mechanisms the City could employ should part of the funding for the project not be implemented as planned. These mechanisms include deferral of improvements, use of contingency, increased debt issuance, and short-term borrowing. The sensitivity analysis evaluated what-if scenarios, such as the $300 million LOI being unavailable or disapproved, reduction in airline traffic with the loss of a major carrier at O'Hare, and the possibility that the authorized level of PFC collection is static. The sensitivity analysis demonstrated that changes in cost per enplaned passenger resulting from the use of these mechanisms would not be substantial and in some instances could be offset by cost benefits from the project's implementation.

The Campbell-Hill concept of funding of airport projects would require that prior to NEPA approval all funding needed to complete the entire project would have to be secured. This concept would necessitate the prior or concurrent issuance of all Airport Improvement Program (AIP) Grants, Passenger Facility Charge (PFC) impose and use application approvals, and sale of all necessary GARBs with the environmental approval that this ROD provides. The FAA does not agree with this concept.

The FAA does agree that the project must be evaluated from a financial feasibility standpoint and has conducted due diligence in this area with regard to the OMP. This evaluation of financial feasibility was conducted by the FAA to ensure that the project was indeed feasible.

The FAA notes the following facts regarding capital development at airports:

- Sponsors do not need FAA funds to implement a capital improvement for their airport. Sponsors can fund a project without federal funding. However, it is required that NEPA approval to amend their Airport Layout Plan be obtained from FAA.
- LOIs, AIP Grants, and PFC (authorization to impose and use, or use), require NEPA approval prior to FAA approval or authorization.
- A sponsor is not required to obtain a LOI approval prior to obtaining a grant. In most instances, sponsors do not. In addition, LOI approval is not a guarantee that federal funding will occur. The LOI can be withdrawn, and there is no guarantee of a continued revenue stream of funding.
- AIP grants can only be issued for funds appropriated in the current fiscal year, and it neither reasonable, nor industry practice, that all grant funding for a major capital development project would be secured within a fiscal year. Additionally, an AIP grant cannot be issued without environmental approval being issued.
- It is impractical and imprudent for a sponsor to issues bonds for its entire multi-year project at the outset of implementation, and therein require paying interest for funding, which would not yet be required.

9 – The FAA notes Dr. Campbell's summary of findings and conclusions. FAA has responded to the findings and conclusions where the basis for the findings and conclusions are made throughout the Campbell-Hill submittals and this affidavit.

12/13 - The FAA completely disagrees with this statement. As is often the custom in reports of this type, the Department of Transportation Office of Inspector General (OIG) provided the FAA with a draft of its preliminary report, and invited the FAA to respond to it. The FAA responded to the Draft OIG report on May 20, 2005 and June 15, 2005. It is not uncommon for these reports to be revised following receipt of comments as part of the internal interagency review process. The Final OIG report was dated July 21, 2005, and made public at that time. Since the Final EIS was in the process of being printed, the FAA did not include it in the FEIS. The FEIS does not make explicit reference to the report and the Inspector General expressly disclaimed any interest in this NEPA process. Nevertheless, the FAA did address some of the OIG's concerns within the FEIS, including Section 1.7 of the FEIS and supporting documentation. Again, the FAA directs the commenter to Section 10 of this Record of Decision for the FAA's discussion of the report. In addition, the OIG report contains FAA's response dated May 20, 2005 and June 15, 2005, and commitments. The FAA is in the process of preparing a formal response to the IG report.

15 – The FAA addressed the issue of availability of AIP funding in its response to the Campbell-Hill letter dated April 6, 2005, in the Final EIS, Appendix U, page U-566. Specific comments related to the City's BCA are not being addressed here. The FAA notes that Campbell-Hill and others have submitted extensive comments on the City's original BCA dated February 2005. Since those BCA comments will be considered as part of the Agency's LOI review process, which is separate and apart from this EIS process, the FAA considers specific BCA comments (e.g. cost-benefit ratio, forecast, etc.) beyond the scope of this EIS. However, general programmatic issues related to LOI and PFC funding have been considered by the FAA in the EIS and this ROD.

16/17 – These comments have been forwarded for consideration within the LOI/BCA review process.

18/19 - The FAA created delay curves based on Phase I of the O'Hare Modernization Program. The FAA recognizes that there would likely be some increase in unimpeded travel times during portions of Phase I of the project due to the interim runway and taxiway geometry. Both delay and unimpeded travel times were included in the detailed TAAM analysis completed as part of the Environmental Impact Statement and used as the basis for the Benefit Cost Analysis. However, the increase in projected unimpeded travel times is offset by a greater value in the average annual delay reductions.

20 – The FAA addressed a similar PFC comment in the FEIS in Appendix U, page U.4-568.

21 – FAA cannot guarantee if or when an increase in the authorized PFC level will occur. However, Congress has authorized PFC increases in the past. Thus, there is historical precedent for increasing the level of PFC funding per passenger. This prior increase in the authorized PFC level (from $3.00 to $4.50) was determined appropriate due to (1) increased airport funding requirements and (2) the recognition of inflationary increases in general prices (including prices of airport improvements) relative to the fixed absolute level of the PFC. FAA believes that it is reasonable to assume that the authorized PFC level will again be increased in the future, for these same reasons, and that a future level of $6.00 (that is, the same increment of increase as the last approved increase) is reasonable to assume in an airport financing plan such as the financing plan for ORD.

Given the benefits of the OMP, FAA does not believe it is essential to know the exact point when Congress might approve an increase in PFC level. The significant economic benefits to airlines of modernizing ORD (e.g., delay savings and revenue from increased traffic), combined with the support from key airlines for the OMP, indicate to FAA that it is reasonable to assume that airlines would be willing to proceed with OMP even with a delay in an authorized increase in the PFC funding level and a corresponding requirement to adjust the financing plan.

The FAA has also considered the impact of no PFC increase and believes that the types of funding adjustments that might be required would still result in an overall reasonable finance plan.

22 - FAA acknowledges that airlines serving ORD have to-date only provided MII approval for initial phases of OMP. The OMP is to be financed in phases, and airline MII approval will correspondingly be requested in phases. Just as it does not make sense to issue debt at the outset for all phases of OMP (because this would involve unnecessary interest expense for funds not currently required), it also does not make sense to obtain airline MII approval for all phases of OMP at the outset (because the financing plan conditions will continue to be refined and the mix of airlines involved in making the commitment will change over time).

The FAA believes it is reasonable to expect that the airlines serving ORD will approve future requests for incremental funding of OMP, given the positive statements made by key airlines regarding the need for the full OMP (as acknowledged by the commenter). as well as the significant benefits that will accrue to airlines serving ORD and the comments provided on record in support of OMP. Also, it is important to note that the airlines at ORD have approved Phase 1 projects (such as land acquisition) that would only make sense if the entire OMP were to be completed. FAA believes that airline support of such "full-build" elements of Phase 1 indicate an intent to proceed with the complete OMP development.

23-25 –FAA understands that there is always some element of risk and concern associated with special facility bonds and other forms of third party financing, and has taken this into consideration in reviewing the financing plan for OMP.

FAA has reviewed recent developments associated with special facilities bonds at U.S. airports, including the example cited by the commenter of United's special facilities bonds at ORD. FAA has concluded that there are circumstances in which special facilities bonds can carry risk of default or non-payment, but that this does not mean that this financing vehicle will not be appropriate or available in the future. As an example, a recent court decision to allow United Airlines to discontinue payment on special facility bonds at New York-JFK Airport did not prevent a recent issuance of special facility bonds by American Airlines for terminal facilities at that same airport.

FAA believes that special facility bonds will continue to be a valuable source of funding for airport improvements, if properly structured—and further believes that this is borne out by the recent issuance of special facility bonds at New York-JFK Airport. Given the airlines' interest in implementing OMP, FAA believes that it is reasonable to expect that airlines serving ORD would be willing to execute appropriately-structured agreements to use special facility bonds for facilities that are dedicated to their use and their benefit.

26A – The FAA established the Airspace Management Advisory Council specifically to address intra-agency coordination efforts, particularly insofar as airspace is concerned. The collective responsibility of the group, chaired by the Director of System Operations, Airspace and Aeronautical Information Management, is establishing cost and schedule controls, timely coordination with other FAA service areas and programs. The initial task is reviewing all National Airspace Redesign (NAR) projects, including those outside of the Chicago Area that support the OMP required airspace changes. These airspace initiatives are prioritized and synchronized with the Chicago ARTCC airspace changes to ensure that the anticipated benefits of the OMP are realized. The costs associated with these airspace changes have been identified, and the funding is being identified. Some of these airspace changes are part of the larger NAR Chicago Airspace Project; the funding for these initiatives has been identified in the ATO 2006 budget, and the work programmed in the ATO-W 2006 workplan.

26B – The FAA agrees that the cost estimates of the OMP did not explicitly include the cost of the surface transportation mitigation, as it was not established until the issuance of this Record of Decision. However, the FAA notes that the anticipated cost of this mitigation is well within the cost contingency that is included in the Master Plan cost estimate.

26C – In response to the April 6, 2005 Campbell-Hill submittal, the FAA noted the capitalized interest is not a capital cost. This opinion has not changed and is consistent with airport financing practice, see FAA's response to Campbell-Hill comments 96 and 97 beginning on page U.4-562 of Appendix U of the FEIS.

26D – The FAA has reviewed cost estimates provided by the City of Chicago and has found them to be reasonable. Further discussion is provided in Section 1.7 of the Final EIS. The FAA does not consider that a detailed line item and quantity and unit cost review is necessary, or required, for an EIS or to issue a ROD.

27 – The FAA disagrees with the commenter's assertion that the Phase One project is not financially feasible. For purposes of its review under NEPA, the FAA concluded that the estimated costs of the project are reasonable, it is reasonable to assume that there will be sufficient funds to complete the proposal, and there is no reason to believe that the City's financial plan cannot be implemented as generally presented in the Master Plan. The FAA's decisions on AIP and PFC funds involve separate processes that are not only different from its environmental analysis, but also are normally concluded only after the environmental issues are resolved and a ROD on those matters is issued.

28 - Comment noted.

30-36 – These comments have been forwarded for consideration within the LOI/BCA review process.

37 - The FAA addressed a similar PFC comment in the FEIS in Appendix U, page U.4-568.

38 - The FAA respectfully disagrees with the commentor's assertion that Chicago has removed Taxiway Lima Lima and its associated costs from the Phase I project. Recent correspondence with the City of Chicago has confirmed the City's intention to construct Taxiway Lima Lima according to the proposed phasing plan utilized for the EIS. In addition, the City of Chicago's Airport Layout Plan submitted in September 2005 for approval contains Taxiway Lima Lima on the Phase I drawing and the future full-build drawing.

39 – This comment has been forwarded for consideration within the LOI/BCA review process.

40 – Comment noted.

41 - FAA respectfully disagrees with the commenter's assertion that FAA has relied on "bald unsupported assumptions" and reached "bare bones conclusions" in determining that OMP is financially feasible. FAA has conducted a thorough review of the OMP financing plan. The response to comments on the DEIS and the additional information provided in the FEIS, and made publicly available, including being posted on the FAA website, indicate the thoroughness of FAA's review of the OMP financing plan. FAA has thoroughly reviewed the OMP financing plan, provided detailed and analytical responses to comments and questions, and is confident that the ORD OMP can provide the benefits that have been estimated and is correspondingly financially feasible.

42 - The commenter has offered two selected quotes from the FEIS as evidence that FAA has not addressed concerns regarding the financial feasibility of OMP. These two quotes do not reflect the effort or level of analysis undertaken by FAA to confirm the financial feasibility of OMP for purposes of this ROD. The FEIS and the administrative record accurately document the

agency's thorough consideration of this issue in the satisfaction of its environmental obligations. In addition to this ROD, FAA has considered and responded to previous Campbell-Hill's submissions in the FEIS.

43 – The FAA has reviewed recent bond issuances by the City of Chicago as part of its review of OMP financial feasibility, and has included the City's success on the bond market as one factor in its overall analysis.

44 – As stated earlier, the FAA believes that OMP is financially feasible. Section U.4 of the FEIS, the responses to comments in Appendix U of the FEIS (including specific responses to Campbell-Hill), and the responses to comments in this document, provide further explanation of the basis for FAA's conclusion.

45 – As noted above, the FAA does not believe that there are any outstanding issues or questions to which it has not been responded regarding financial feasibility of OMP for purposes of this ROD.

46 – FAA has given detailed consideration to blended alternatives in the FEIS. See, FEIS at Chapter 3 for its analysis.

47 - FAA does not agree that blended alternatives can meet the forecast unconstrained demand at ORD, as documented in the FEIS.

48A - FAA has documented in the FEIS that OMP will meet forecast demand at ORD. FAA has also documented in the FEIS that OMP is the preferred alternative to meet forecast demand at ORD.

48B - See response to comment 46 above.

49 –FAA has conducted a review of the financial plan for OMP. Thus, FAA does not agree that there is any reason to consider a different preferred alternative under the assumption that OMP is financially infeasible.

50 – The FAA believes that it is reasonable to expect that required funding will be available for OMP.

51 - The FEIS demonstrates that OMP Phase 1 (i.e. Alternative B) does not meet the purpose and need.

52-56 The FAA rejects the commenter's assertion that it cannot authorize this proposed action in the absence of a showing by the sponsor that the entirety of all funding for the complete OMP has been assured at this time. Such a suggestion is at odds with established practices for

financing a project of this size and scope, is not required by FAA regulations or guidance, and defies common sense.

57 - FAA acknowledges that these are key factors in the analyses conducted for the EIS. However, there are also many other variables and factors that were considered and analyzed, as documented in the FEIS.

58 – FAA addressed the use of the 2002 TAF in both the main body of the FEIS and in the response to comments contained in Section U.4 of Appendix U.

59 – See response to comment 46.

60 – 66 - FAA addressed Campbell's discussion of "acceptable levels of delay" in both the main body of the FEIS and in the response to comments contained in Section U.4 of Appendix U.

67 - These examples were not used in connection with the determination to use 15 minutes delay as a threshold in developing the constrained forecast. This is explained in both the FEIS and the response to comment in the FEIS.

68/69 – FAA disagrees with the commenter's assertion that the time period of analysis for the EIS should be based on financial analysis guidelines. Please see response to Karaganis-Cohn's September 6, 2005 comment regarding the same on page A.2-80 of this Appendix A.

70 - FAA set forth a statement of purpose and need, which included meeting forecast unconstrained demand. As documented in the FEIS, FAA considered various alternatives for meeting unconstrained demand, including blended alternatives. Contrary to the commenter's assertions, FAA did not "claim that it need not consider any blended alternatives". In fact, FAA carefully considered blended alternatives, as documented in the FEIS.

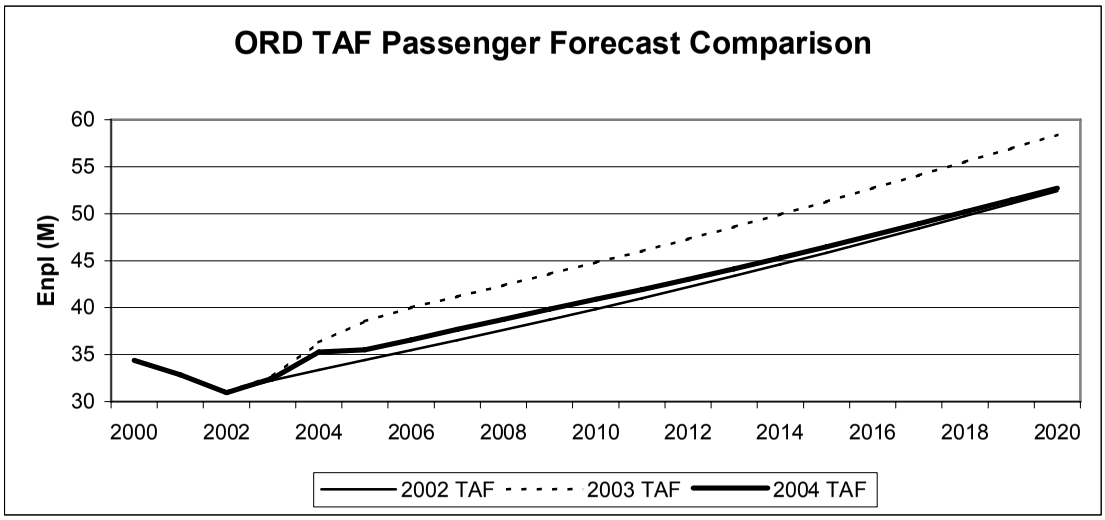
71 - FAA rejects as totally unfounded the assertion that FAA improperly manipulated any of the analysis reported in the FEIS. The FEIS contains a full disclosure of the analyses conducted in relation to consideration of alternatives. Other than making an assertion, the commenter has not offered any specific evidence of the purported "manipulation". In 1984, opponents of O'Hare improvements asserted that the FAA kept "two sets of books" on the City's proposal. This claim was rejected decisively by the courts. Two decades later, their claim of data manipulation is equally without foundation or merit.

72 - FAA acknowledges that blended alternatives should be considered. As documented in the FEIS, the FAA carefully considered blended alternatives. For the reasons documented in the FEIS, a blended alternative was not selected as the preferred alternative.

74 - FAA's basis for using the 2002 TAF, and the consideration of subsequent published TAFs (2003 TAF and 2004 TAF) is explained in the FEIS and response to comments in the FEIS.

75 – The 2004 TAF was not manipulated downward. The methodology used to generate the passenger forecasts in the 2004 TAF was the same as has been used the TAF's since the events of September 11, 2001.

76 - FAA does conduct a comprehensive review of recent airline activity and the future outlook (including socio-economic data) for each annual TAF. This process was done for the 2002 TAF, the 2003 TAF, and the 2004 TAF's for ORD. The difference in the forecast passengers for ORD in 2020 between the 2003 TAF and 2004 TAF is almost entirely explained by differences in the forecast enplanements for 2004 and 2005. For the period 2006-20 the average annual growth rate in enplanements is forecast to be roughly the same, 2.6% in the 2004 TAF and 2.7% in the 2003 TAF (see chart below).



77 – The methodology that the FAA employed to develop the passenger forecasts for the 2002 TAF, the 2003 TAF, and the 2004 TAF for ORD was not exclusively based on "regression analysis of income and other local socio-economic variables". In fact there is a fundamental difference in the FAA's forecast methodology for developing near term (1 year out) passenger forecasts as opposed to longer-term (more than 1 year out) passenger forecasts. In general, the FAA develops its near-term passenger forecasts using future schedules published by the airlines (up to 12 months in the future) that are publicly available as a basis for activity (departures) and forecasted values of passengers per departure based on historic seasonal (month to month) patterns. FAA employs information contained in the actual airline schedules in its near-term forecasts as opposed to a methodology relying solely on modeling. Longer-term forecasts are generally based upon results of econometric models (regression analysis) relating passenger demand to a series of local or national socio-economic variables such as income or price (yield). The methodology described above was used to generate the passenger forecasts for ORD contained in the 2002 TAF, the 2003 TAF, and the 2004 TAF.
The passenger forecast for 2005 contained in the 2003 TAF was generated using a number of econometric models relating income and yield to passengers. This was done primarily because

there was no information (future schedules) available about the level of activity (departures) in 2005 to incorporate into the generation of the 2005 passenger forecast at the time the 2003 TAF was done. This process was clearly explained in the document "ORD Forecast Methodology" contained in the 2003 TAF documents that were submitted as part of the FOIA request and was referenced by Campbell-Hill in exhibit F, Table F-1.

The passenger forecast for 2005 contained in the 2004 TAF was developed using future schedules as a basis for a level of activity (departures) and forecasted values of passengers per departure based on historic month-to-month patterns. This is explained in the document "ORD 04 Forecast Methodology" that was provided by the FAA on August 26, 2005 in response to the FOIA request. An examination of the future schedules at the time the 2004 TAF (found in worksheet "Domestic OAG" in the file ORD 04.xls that was also submitted in response to the FOIA request) indicated that year over year growth in total commercial departures at ORD was slowing down significantly from the rates experienced in FY 2004 (+7.9%), turning negative beginning in Nov 2004 and remaining negative through June 2005 (the last month future schedules were available to FAA). FAA believes that the information about the reduced levels of activity (departures) that was available at the time of the development of the forecast contained in the 2004 TAF provided reasonable grounds for the reduction in the forecasted growth of passengers in 2005 relative to the forecast passenger growth rate for 2005 found in the 2003 TAF.

78 – The documents provided by FAA on August 26, 2005 do provide supporting evidence and calculations for the 2004 TAF passenger forecasts, as well as the passenger forecasts contained in the 2002 and 2003 TAF. The detailed review that Campbell-Hill performed (Exhibit F) only focused on the local socio-economic factors as the basis for their conclusions. The FAA employed a methodology that included consideration of factors beyond local socio-economic variables (see response to point 77), and thus was more comprehensive than the analysis by Campbell-Hill. As a result, the commenter's conclusion that the 2004 TAF should have been higher than the 2003 TAF is incorrect.

In addition, the passenger data that Campbell-Hill cited in Exhibit F supporting the claim that the 2003 TAF passenger numbers were closer to actual passenger numbers (Chart 1 in Exhibit F) include non-revenue passengers that are not included in the TAF passenger forecasts.

79 – The documents provided by FAA on August 26, 2005 do provide supporting evidence and calculations for the 2004 TAF passenger forecasts as well as the passenger forecasts contained in the 2002 TAF and 2003 TAF. Examination of the documents provided shows that the same methodology was used to develop the passenger forecasts for the 2002 TAF, 2003 TAF, and 2004 TAF. This methodology can be replicated or recreated by independent experts.

80 – As described in the responses to points 77, 78, and 79 above, FAA believes there is sufficient data and substantiation for the reduction in the enplanements and operations forecasts from the 2003 TAF to the 2004 TAF.

81 – FAA believes that employing the methodology described in point 77 above would lead one to conclude that a properly calculated 2004 TAF would result in lower, not higher (as has been asserted by Campbell in the affidavit), numbers of enplanements and operations in corresponding years than the 2003 TAF. Additionally, the most recent data on passenger activity at ORD (12 months ended July 2005, as cited by Campbell in Exhibit F, Chart 1), indicate that the passenger forecast in the 2004 TAF, not the 2003 TAF, is closer to the actual passenger counts, providing further evidence that the reduction in passengers between the 2003 TAF and 2004 TAF was proper.

82A –The FEIS has an explanation of the development of the constrained forecast. FAA does not believe it is reasonable to assume that the "stop gap" schedule order would be or should be permanently in place at ORD. Arbitrarily assuming a lower level of flight activity would be a convenient way to reduce projected delays, but would not, in FAA's view, result in accommodating forecast demand or meeting purpose and need.

82B – FAA has disclosed the delay savings in relation to the forecast adopted for the EIS, the 2002 TAF. The use of the 2002 TAF is fully explained in the FEIS.

82C – The FAA agrees that there will be an increase in unimpeded travel time as the proposed runways are located further from the terminal core area. However, the FAA respectfully disagrees with the commenter's assertion that the full-build OMP-Master Plan will have a taxi time penalty of 6.5 minutes per operation. Based on the TAAM modeling completed by the FAA as part of the EIS, average unimpeded ground travel time increases by 4.2 minutes per operation. This increase in travel time occurs with a subsequent reduction in delay of 11.4 minutes per operation at the 2018 activity level for a net delay and travel time reduction of 7.2 minutes per operation. In addition, at the 2018 activity level the airport is able to accommodate 220,000 additional operations and 10,799,000 additional total passengers.

83/84 - FAA addressed Campbell's discussion of "acceptable levels of delay" in both the main body of the FEIS and in the response to comments contained in Section U.4 of Appendix U.

85/86 - FAA disagrees with the commenter's assertion that the time period of analysis for the EIS should be based on financial analysis guidelines. Please see response to Karaganis-Cohn's September 6, 2005 comment regarding the same on page A.2-80 of this ROD.

87 - The FAA does not agree with the commenter regarding the EIS alternatives analysis. In addition, the items listed by the commenter are not "assertions" made by the FAA but conclusions based on the analysis presented in the Final EIS.

88 – 93 – The FAA has addressed the commenter's concerns regarding the alternatives analysis in Chapter 3, Section 3.6 of the FEIS and Section 11 of this ROD.

94 – Comment noted.

95 – The FEIS explains the analysis used to determine Alternative C meets purpose and need. FAA rejects the notion that the analysis must be conducted using an alternative forecast developed by the commenter.

96-98 – The FAA addressed these comments in responding to previous comments submitted by Campbell-Hill on April 6, 2005, which can be found in Section U.4 of Appendix U of the FEIS.

99/100 - The review and analysis of derivative alternatives is documented in the FEIS and in this Appendix A for this ROD (see Fleming affidavit response). The commenter has suggested that alternatives should be re-evaluated, using the commenter's preferred level of delay for Alternative C. FAA rejects the commenter's basis for assuming average delay of 21.5 minutes for Alternative C. The average delay level for Alternative C has been thoroughly modeled and documented in the FEIS.

101-108 – The FAA has addressed the commenter's concerns regarding the alternatives analysis in Chapter 3, Section 3.6 of the FEIS and Section 11 of this ROD.

109-113 – The FAA has addressed these issues in Section 11 of this ROD.

115 - FAA has considered the potential use of other hubs, in both the body of the FEIS and in several responses to comments in the FEIS. FAA has concluded that the availability of capacity at another airport is not sufficient basis to assume that the airlines using ORD as a hub would decide to move or split their ORD hub. In fact, in the past several years airlines have exhibited a greater tendency to consolidate operations at their main hubs, rather than spread connecting operations over multiple new hubs.

116/118 - The commenter has referred to high yields for connecting passengers at other hubs. The commenter has not offered comparative data on yields. The commenter offers a list of airports that are asserted to be attractive as alternative hubs to ORD. FAA does not believe that the main hubbing airlines at ORD would agree. For example, American reduced connecting activity at STL, which is a location the commenter offers as an attractive alternative.

119 - The commenter asserts that the geographic location of hubs is irrelevant to their suitability as an alternative for airlines hubbing at ORD. FAA disagrees with this assertion. In any event, the focus of FAA's assessment was other mid-continent hubs.

120 - The comment expressed here is, in the judgment of the FAA, inconsistent with the prevalent consensus within the aviation industry as to the economic benefits of major airport improvement projects. Moreover, this comment is diametrically contradictory to the author's 2002 report "The National Economic Impact of Civil Aviation". There the report concluded,

"more aggressive investment in civil aviation infrastructure is not only justified by benefits/cost analysis – it is also essential to the well being of the U.S. economy and its citizens."

121/122 - The FAA responded to Campbell-Hill's detailed comments regarding the use of other mid-continent hubs as an alternative in FEIS Appendix U, beginning on page U.4-586. With regard to the moving of information on mid-continent hubs from EIS Appendix C to Chapter 3, FAA believes the commenter has "over-interpreted" the refinements to the organization of sections in the FEIS. FAA simply decided that it made the most sense for clarity of presentation to move the text regarding mid-continent hubs from Appendix C to Chapter 3.

123/124 - FAA previously responded to this comment in the FEIS, beginning on page U.4-587.

125-128 - The commenter disagrees with the FAA opinion that significant connecting flow is a key to the success of the ORD international gateway. The commenter appears to dismiss ATL as a relevant comparison, in terms of local-connect ratio, for, among other reasons, the following key reason: "because of geography and history it is Delta's largest system hub". This directly contradicts comments offered by the commenter in this same document:

- Comment 119—this comment seems to indicate the commenter's opinion that geographic location is irrelevant to airline hubbing decisions.
- Comment 118—this comment seems to indicate the commenter's opinion that "historical function as a connecting hub" is not a key factor.

In summary, the commenter states in comment #127 that ATL is not a valid comparison due to "geography" and "historical function". However, in earlier comments, the commenter has dismissed each of these factors. Thus, FAA does not find the commenter's arguments compelling.

The commenter offers Toronto as a more valid comparison. However, Toronto is not in the United States, and subject to different bilateral trade agreements and government regulations. FAA does not believe that it is valid to use Toronto as a comparable to ORD for the purpose of evaluating international gateway status.

129 - FAA has provided a summary of the "LAX example", and reasons why this is different from the ORD situation in the FEIS beginning on page U.4-595.

130-131 - The commenter asserts that "the geographical spread of a population should not effect the FAA's consideration of alternatives…" FAA does not agree with this assertion. Taken to its logical extreme, this assertion would imply that airlines should be expected to use any available airport, regardless of the incidence of demand in the area around that airport. This is simply not consistent with reasonable business practices. Every regional situation is unique, and needs to be considered in determining what is reasonable to assume regarding airlines' use of various airports. In the FEIS, FAA has presented data on various regions, and explained why

FAA has concluded that it is reasonable to assume that ORD will continue to be a major focus of airline activity in the Chicago region. Compare, for example, the different population densities surrounding regional airports as shown in Exhibits 3-3 and 3-4 of the FEIS.

132 - The commenter seems to assert that it is wrong to recognize the differences between airports. FAA believes that it is important to consider the particular local and regional circumstances associated with any airport for which improvements are proposed. In fact, the commenter's arguments elsewhere in the comment document repeatedly refer to differences at individual airports (e.g., the particular situation at ATL); this conflicts with the apparent assertion in this comment that unique airport circumstances should not be considered.

133 - FAA believes that the airlines are the ultimate judges of strategic viability. The U.S. aviation market is deregulated, and airlines are free to serve the markets of their choice. The two main hubbing airlines at ORD—United and American—have indicated their support for OMP, as a means of accommodating future demand in both local and connecting passengers. While Campbell-Hill may have an opinion that increased capacity is not necessary to support the hubbing activities of these airlines, United and American are on record as stating that such increased capacity is necessary.

The commenter has stated that FAA has not offered analysis to demonstrate that a reduction in connecting activity would weaken the viability of the hub. FAA has in fact provided the following evidence and analysis:

- the unconstrained demand forecast prepared by FAA, which indicates the level of future activity expected by FAA to be associated with the continued development of the ORD hub
- statements by United and American, indicating that increased capacity at ORD is necessary to support the continued development of the hub—not providing this capacity would conversely result in a compromise of the airlines' hub development plans

In fact, the shortfall in analysis is from the commenter—the commenter has not offered compelling evidence that airlines would choose or otherwise prefer an alternative to the development of the ORD hub. For example, in the response to comments on the DEIS, FAA provided the example of STL—American reduced its hub and focused activity on ORD. The commenter has not offered any evidence that American would reverse this decision and suddenly begin moving hub operations from ORD to STL.

134 - FAA does not find the comparison of ORD to JFK compelling. The market conditions, airport locations, and population characteristics in the New York region and the Chicago region are substantially different.

135 – FAA has adequately and responsibly evaluated alternatives and assessed financial feasibility and environmental impacts, contrary to the commenter's assertion. The FAA has addressed this comment in its thorough evaluation of reasonable alternatives in the FEIS.

The commenter asserts that "regional solutions" in Los Angeles and Boston should be used as a model for Chicago. In the FEIS, FAA provides the reasons why the Chicago region is different from the Los Angeles region, and therefore why the regional airport solutions are necessarily different. Moreover, as noted earlier, the FAA responds to the airport sponsor's proposal for improvement. Thus, the particular path selected by Los Angeles and Boston recently, and Chicago in 1984, evidenced a respect for the limited expectations of physical improvements. Such respect for the role of the sponsor is equally appropriate when that sponsor, as is now true in Chicago, has adopted a more expansive and ambitious approach to airport improvements.

136/137- The commenter asserts that FAA "has no basis" for conclusions regarding the use of multiple airports in a region. FAA presented data in the FEIS on multi-airport regions, and this is the basis for FAA conclusions. The commenter has not provided compelling alternative evidence that would produce reasonable alternative conclusions. The commenter's opinion is supported instead by statements such as "could simply be", which does not, in FAA's view, represent compelling evidence. Anything "could simply be", but this does not mean there is a logical reason for it.

The commenter cites examples of multi-airport regions (Los Angeles, San Francisco, Washington/Baltimore, New York, and Chicago). These were all considered by FAA. The commenter does not offer any data or analysis related to these multi-airport regions which would refute the conclusions reached by FAA.

138/139 - The commenter asserts that capitalized interest should be included as a capital cost. FAA has responded to this comment in the FEIS. To further clarify, FAA understands that capitalized interest is a cost associated with the implementation of OMP. This cost has been included as a financing cost in the financing plan for OMP. To include capitalized interest as a capital cost would be a "double-count" of this cost, as it has already been included as a financing cost. This has been explained in the FEIS, beginning on page U.4-562.

140 - The commenter has cited data from FASB. This is interesting, but does not change the fact that capitalized interest has been accounted for in the OMP financing plan.

141/142 - The FAA's understanding of capitalized interest does not comport with that of the commenter.

143 – The FAA does not agree with Campbell-Hill's analysis.

144 - The commenter asserts that FAA has asserted that interest expense during construction should not be capitalized. This assertion is simply wrong. FAA has stated that the OMP

financing plan includes interest capitalized during construction, and has reported the amount of this capitalized interest. What FAA has stated is that it would be incorrect to include such capitalized interest as both a capital cost and an interest cost. See FEIS response to comments.

145 - The commenter asserts that the City did not include the cost of interest during construction. The FAA addressed this comment in the FEIS response to comments.

146/147 - FAA directs the commenter to response to comment 20 of this document.

Comment	Response
Attachment 3 to Karaganis-Cohn	The FAA's response to Mr. Fleming's affidavit appears immediately following the last page of the affidavit.

050906_06

Affidavit of Kenneth Fleming

Kenneth H. Fleming, first duly sworn on oath, deposes and says:

1. I currently serve as Director, Air Traffic Management Research at the School of Aviation, Embry-Riddle Aeronautical University, in Daytona Beach, Florida. Embry-Riddle is one of the world's preeminent institutions on the science, practice and business of aviation, aerospace, and related technologies.

2. I have a Ph.D. in Economics from the University of California at San Diego.

3. Since 1988, I have been a tenured professor at Embry-Riddle Aeronautical University, serving first as Chairman of the Department of Business Administration (1988-1994) and from 1994 to the present as Director, Air Traffic Management Research at the School of Aviation at Embry-Riddle.

4. From 1982 to 1988, I served on the faculty of the United States Air Force Academy at Colorado Springs, Colorado - first as Chairman and Professor, Department of Economics at the Air Force Academy (1982-1986) and then as Vice Dean of the Air Force Academy (1986-1988).

5. From 1979-1981, I served as Commander of the 704th Tactical Air Support Squadron, United States Air Force and from 1981-1982 as Assistant Deputy Commander for Operations, 601st Tactical Control Wing, United States Air Force.

6. My expertise at Embry-Riddle is in a wide variety of areas involving air traffic control and air traffic management.

7. During the past ten years, I have been involved in a multitude of programs where modeling and simulation technologies were used to assess and evaluate airspace and airport operations, delay and capacity issues, and the development of national airspace procedures. These initiatives included funded research programs

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for the Federal Aviation Administration, NARI, Lockheed Martin Corporation, Boeing Corporation, Harris Corporation, Honeywell Corporation, NASA Ames Research Center and NASA Langley Research Center, as well as numerous other customers with a requirement for economic or operations research-oriented analysis in aviation and airspace systems and facilities.

8. At the present time I lead a group of 15 research analysts and computer programmers at Embry-Riddle who are actively participating in applied aviation research projects with Boeing, NASA, and the FAA. I have been the principal author or co-author of over 17 reports over the past six years that have dealt with all aspects of aviation and airspace management.

9. In addition to my academic qualifications and experience, I am a former United States Air Force pilot with over 3,000 hours in nine different aircraft, including bombers, transports, and single-seat fighters.

10. I, along with my colleagues, Mr. Joseph Del Balzo (former Acting Administrator of the FAA) and Mr. William Marx (a former senior FAA air traffic management expert), have been retained by the municipalities of the Village of Bensenville and Elk Grove Village to examine issues relating to Chicago's proposed "O'Hare Modernization Program" (OMP), including proposed and alternative runway configurations, impacts on air traffic and airspace congestion, evaluation of alternatives to the OMP, and the FAA's Final Environmental Impact Statement.

11. The FAA's Final EIS states that the FAA is required, pursuant to its own Orders, to examine all "feasible and prudent" alternatives, which, according to FAA requirements, "involves a study of those alternative that are practical or feasible from the technical and economic standpoint and using common sense." See, FEIS page

ES-18 ("[an alternative] may not be prudent, however, because of safety, policy, environmental, social, or economic consequences." FAA Order 5050.4A, paragraph 83b.

12. In addition to the requirements of NEPA and FAA Orders, the FAA has conceded the application of the Religious Freedom Restoration Act to the OMP, concluded that approval of the City of Chicago's Preferred Alternative will substantially burden the St. Johns United Church of Christ cemetery and acknowledged that RFRA requires that FAA must determine that the OMP is "the least restrictive means" to further a compelling governmental interest.

13. In my expert opinion, the Preferred Alternative is the least prudent and feasible alternative and, moreover, there are a number of viable, prudent and feasible alternatives that will accomplish the FAA's stated purpose and need better than the Preferred Alternative without the destruction of the cemeteries and the communities.

14. In my analysis of the OMP and alternatives, I have focused on the availability of alternatives to the Preferred Alternative (Alternative C) including "blended alternatives." "Blended alternatives" are alternatives which involve a combination of actions including some level of runway and taxiway facilities at an airport such as O'Hare in conjunction with the use of what FAA calls "congestion management" techniques to manage delays to acceptable levels and combined with the use of other airports to carry the excess traffic that would otherwise use the airport if there were no constraints on capacity.

15. Blended alternatives are feasible for Chicago O'Hare, are currently in use at O'Hare, are in widespread use by the FAA in several metropolitan areas of the United States including New York's LaGuardia Airport and Washington D.C.'s Reagan Washington National Airport, and have been recently approved by the FAA in the recent Record of Decision approving the Airport Layout Plan for Los Angeles

International Airport (i.e., relying on Los Angeles International Airport in combination with other local Los Angeles airports).

16. Alternatives H-L of the alternatives identified and described in the April 6, 2005 and May 6, 2005 submissions to the FAA by the communities of Bensenville and Elk Grove are all blended alternatives which would control delay to acceptable levels and also handle forecast growth and meet the FAA's stated purpose and need without the destruction of the cemeteries and the communities.

17. Based on the delay analysis set forth by the FAA in the FEIS and using more current 2003 or 2004 Terminal Area Forecasts (TAF), it is my expert opinion that (A) Phase One of the OMP will reach gridlock with delay at or exceeding historic high levels on opening day and (B) the full OMP will, using the 2003 TAF, reach gridlock with delay at or exceeding historic high levels within a year of opening day and, using the 2004 TAF, will reach gridlock within five years of opening day. As a result, both OMP Phase 1 and the full OMP will require some form of congestion management to reduce delays and congestion (as is being done today at O'Hare) and reliance on use of other airports to accommodate future demand (i.e., a "blended alternative").

18. I have met with senior air traffic control representatives of the O'Hare Air Traffic Control Tower and discussed various aspects of the OMP proposal and alternatives to the OMP proposal.

19. The air traffic controllers expressed to me and my colleagues serious reservations about the safety, efficiency and utility both of OMP Phase 1 and the Preferred Alternative approved by the FAA. The Transportation Code does not permit approval of ALPs that would "affect adversely the safety, utility or efficiency of the airport" (49 U.S.C. Section 47107(a)(16)).

20. The description of the controllers' expressed concerns were set forth in the April 6, 2005, May 6, 2005 and September 6, 2005 submissions to the FAA by the Community and Religious Objectors and those are true and accurate descriptions of the O'Hare Tower controllers' communications to me. The controllers raised serious safety concerns about the elimination of the two critical existing cross-wind runways which will create unsafe conditions during high wind/inclement weather conditions which are prevalent in Chicago, particularly during the winter months. They also expressed concerns about the substantial increase in the number of active runway crossings which will inevitably create the potential for accidents due to runway incursions.

21. Alternative L-1 which was presented to FAA in the Communities' April 6, 2005 and May 6, 2005 submissions to the FAA, is a true and correct reflection of the alternative that the controllers developed and preferred over Phase One of the OMP and the OMP.

22. I have reviewed the FAA's discussion of Alternatives to the Preferred Alternative and the FAA's rejection of every alternative other than the Preferred Alternative and in my expert opinion the FAA's conclusions are without foundation and are technically and factually incorrect.

23. I have examined the FAA's statements and conclusions concerning Alternatives L-1 and L-2 in the Final EIS. The FAA agreed that both of these alternatives are "potentially feasible." However, the FAA rejects these alternatives because, according to the FAA:

> "they are most likely to yield less delay savings than Alternative B. Alternative B was found not to meet purpose and need. Therefore Commenters' Derivatives L1 and L2 would not meet purpose and need."

The FAA rejected any further consideration of L1 or L2 because — like Alternative B— the FAA stated that it rejected any alternative that would not meet "unconstrained demand." Since, according to the FAA, only alternatives C, D and G would meet "unconstrained demand" – every other alternative that would not meet "unconstrained demand" was rejected by FAA.

24. However, a critical defect in the FAA's analysis is its arbitrary decision to limit its analysis of Alternatives C, D, and G to an unreasonably short time period of only five years after completion of the OMP. Had the FAA conducted analysis beyond five years, the FAA would have necessarily found that neither Alternative C (Chicago's proposal and the FAA's preferred alternative) — nor Alternatives D and G — would accommodate unconstrained demand at an acceptable level of delay.

25. The FAA would have also found that the FAA would be required to use a "blended alternative" as part of Alternative C – *i.e.,* the use of demand management and the use of other airports to meet the Forecast Demand. The FEIS stated no basis for using such a short time period of analysis. With respect to AIP discretionary funding, which is an essential element of the OMP financing plan, the FAA requires a time period of analysis of 20 years from project commencement (i.e., 20 years from 2013). Further, the FAA specified the use of a time period of analysis through 2030 in its 2002 master planning grant for the OMP.

26. In the FEIS, the FAA asserts that the FAA does not have the authority to implement a "blended alternative" for O'Hare, i.e., the use of O'Hare with various runway configurations in conjunction with congestion management and the use of other airports to handle excess traffic demand.

27. I strongly disagree with that assertion by the FAA. The FAA has the authority to adopt a blended alternative and has done so on a number of occasions. It is

currently using blended alternatives in metropolitan areas throughout the country. Further, as I noted above, both Phase One and the full OMP will experience historic levels of delays (using either the 2003 or 2004 Terminal Area Forecast) shortly after the projects are completed, which will necessitate resumption of the existing congestion management combined with the use of other airports to handle excess demand (i.e., a blended alternative). Thus, after the communities and the cemeteries are destroyed and billions are spent reconfiguring the airport, the airport will be in worse condition than it is today with massive delays and congestion.

28. Before I undertake a detailed analysis of the FAA comments on the various alternatives (H-M and the derivatives), I preface my observations by noting that the FAA has agreed that all of these alternatives are "potentially feasible." There is no question that these alternatives are technically feasible; i.e., they can be safely implemented and operated by the FAA.

29. I have examined the FAA's criticisms in the FEIS of alternatives that would involve shortening Runway 10C to avoid the destruction of the St. John's cemetery and it is my expert opinion, as discussed in detail below, that the FAA's conclusions are factually and technically wrong and its rejection of such non-destructive alternatives is unsupportable and without merit.

30. In the following paragraphs, I identify the FAA's comments in the FEIS and provide a detailed response.

31. FEIS discussion of Derivative C1 –Alternative C with No Runway 10C (Section 3.6.2.1, pg. 3-74, par. 1,2,3,5,6).

31.1 FAA Statement. "While Derivative C1 (five East/West parallels) has the capability to absorb some of the hourly flights lost in the VFR and IFR West primary operating configurations represented in the original alternative, not all of the operations can be accommodated without a higher level of delay."

Response. The FAA's conclusion is erroneous and misleading. The FAA fails to acknowledge that all alternatives — including Alternative C (preferred alternative), and Alternatives D and G — will exhaust all delay savings within a few short years and will correspondingly run out of capacity. The difference between the alternatives will be in the number of operations handled at a given level of delay (i.e., whatever level is determined by the FAA as acceptable).

31.2 **FAA Statement**. VFR and IFR East primary operating configurations do not have the ability to accommodate a greater level of traffic.

Response. The FAA is mistaken. This alternative configuration would allow for triple approaches in both IFR and VFR conditions which will produce significant reductions in delay and increases in capacity.

31.3 **FAA Statement**. All operating configurations under this scenario do not support four arrival runways in a balanced airfield operation.

Response. Quadruple IFR arrivals are not technically feasible today, and there is no timetable when quadruple arrivals would be technically feasible. Discussions with local controllers at O'Hare indicate that triple arrivals and departures are all that is needed for a significant reduction in delay and increases in capacity. The FAA is not relying on quadruple approaches in its capacity/delay modeling.

31.4 **FAA Statement**. The former runway pair of Runways 10C and 10L are no longer coupled operationally during IFR weather. During IFR weather, Runway 10C and 10L must be operated in a sense as one runway, while the pair Runway 10L and Runway 10R can be operated independently.

Response. Since runways 10C and 10L are only projected to be 1200 ft. apart in the preferred alternative, then they would have to have been operated in IFR conditions (by the ordinary rules of separation) as if they were one runway anyway. So from that point of view, the statement makes no sense. Operating 10L and 10R independently is exactly what alternative C-1 would allow, and therefore provides maximum air traffic flexibility between these Runways without destroying the cemeteries.

31.5 **FAA Statement**. "It appears that the absence of this 10,800 foot runway would require an extension to proposed runway 10R/28L of at least 1,000 feet to

accommodate a majority of the forecast fleet mix. Because of existing Runway 4R/22L, such an extension of Runway 10R/28L could only be accomplished on the west side of the runway requiring additional land acquisition in the Bensenville area." (pg. 3-75, par 1,2).

Response. This is not correct. 10R/28L would be used as primarily an arrival runway and not as a departure and arrival runway. Many airports have dedicated arrival and departure runways, and there is no particular reason that they be of equal length. As an arrival runway, the principal requirements would be the landing requirements for the aircraft that would use the runway. Landing requirements are considerably less restrictive than take off requirements. Using the table that was developed in the original OMP concept submitted to the FAA in February 2003 (pg. ll-7, table ll-5), the only aircraft that would be precluded from landing on this runway under restrictive landing conditions (i.e., wet runway, maximum landing weight) would be the B737-800, the B747-400, and the A380 (proposed). Therefore, there is no need to extend runway 10R/28L to the west or acquire any new land.

31.6 **FAA Statement**. "Because of the separation distances required for taxiway clearances and other restrictions it is not feasible to widen to 200 ft. any other propose runway that as long enough to handle NLA."

Response. This is an absurdly incorrect statement. It is perfectly feasible to widen runways and move taxiways. It is also true that the requirements for the new large aircraft have not yet been determined so that this objection may not be valid at all. As in the above discussion, the savings from the non-construction of the extra runway would clearly suffice to make this alteration feasible.

32. The FEIS discussion of Derivative C2-Alternative C with Runway 10C Shortened to 7500' (3.6.2.2).

32.1 **FAA Statement**. "Runway 10C/28C is envisioned as a primary (only one of two on the proposed airfield) runway for group VI aircraft. Reducing the length to 7500 ft. would eliminate this runway from consideration for those aircraft. All group VI

aircraft would be restricted to the north side of the airport and utilize proposed runway 9C/27C."

Response. This is false and misleading. Many airports have dedicated arrival and departure runways, and there is no particular reason that they need to be of equal length. 10C/28C would be an arrival runway only so that the principal requirements would be the landing requirements for the aircraft that would use the runway. And, landing requirements are considerably less restrictive than take off requirements. Using the table that was developed in the original OMP concept submitted to the FAA in February 2003 (pg. II-7, table II-5), the only aircraft that would be precluded from landing on this runway under restrictive landing conditions (i.e., wet runway, maximum landing weight) would be the B737-800, the B747-400, and the A380 (proposed). Therefore, the problem of heavy jets landing on 10C would be eliminated by procedure and they would naturally be replaced by lighter jets.

The second part of a statement is manifestly incorrect since both Group VI aircraft and new large aircraft would be able to use10L for departure -- and this is clearly on the south side of the airport.

32.2 **FAA Statement.** From a proposed runways use perspective, FAA air traffic would operate this layout in the same manner as Alternative C. However, due to the proposed shortening of the runway and supporting taxiway network, operational issues would be significant.

Response. This is essentially a meaningless statement unless the supposed operational issues are detailed and made clear. It should be recalled that this configuration is essentially the same as that of the preferred alternative, so whatever "operational issues" are alleged to exist in this alternative, are also likely to be present in the preferred alternative.

32.3 **FAA Statement.** "Runway 10C/28C would be an arrival runway on any east flow operation. Movement of aircraft west of the approach and of Runway 10C would be impossible while other aircraft arriving Runway 10C, due to requirements to remain clear of protected surfaces."

Response. This is exactly the same as the situation in the preferred alternative, so whatever concerns are applicable to this alternative apply to the preferred alternative.

32.4 **FAA Statement**. The addition of Precision Object Free Zone (POFZ) and Runway Protection Zone (RPZ) restrictions would require arrival aircraft from Runway 10R and Runway 10C to cross Runway 10L at taxiway ZT or further east. This is incompatible with the operation of the runways as conceived, and would provide a significant reduction in the number of departures on Runway 10L with the introduction of up to 60 arrivals crossing Runway 10L per hour in the last 1/3 of the runway.

Response. Runway crossings present the same operational problems in both this and the preferred alternative. This is exactly the same situation as the situation in the preferred alternative since the projected operational configuration (take off and landing directions) is the same in both alternatives. It does not matter where the runway crossing takes place since the air traffic control situation is precisely the same as far as take off aircraft is concerned. In other words, the take off aircraft must be held in place until the runway crossing has been accomplished. For that reason, runway crossings present the same operational problems in both this and the preferred alternative. Therefore, the second part of the statement is either meaningless or applies equally to the preferred alternative.

32.5 **FAA Statement**. Wake turbulence also plays a role in this runway layout. Heavy jet and Boeing 757 aircraft departures on runway 10L at the full-length could become a wake turbulence factor for runway 10C arrivals. In addition, Heavy and Boeing 757 aircraft assigned to arrive on Runway 10C would provide wake turbulence issues for Runway 10L departures.

Response. Wake turbulence from aircraft that are taking off dissipates quickly and depends strongly on prevailing weather conditions and type of aircraft. For example, the FAA's own advisory circular on aircraft wake turbulence (see Advisory Circular, Aircraft Wake Turbulence, AC No.: 90-23E, Date: Feb. 20, 2002, Initiated by AFS-430) has the following statement: "Tests with large aircraft have shown that the vortices remain spaced a bit less than a wingspan apart, drifting with the wind at altitudes greater than a wingspan from the ground….. flight tests have shown that the vortices from larger (transport category) aircraft sink at a rate

of several hundred feet per minute, slowing their decent and diminishing in strength with time and distance behind the generating aircraft." (AC, pg.5). And further: "A wake encounter is not necessarily hazardous. It can be one or more jolts with varying severity depending upon the direction of the encounter, weight of the generating aircraft, size of the encountering aircraft, distance from the generating aircraft, and point of the vortex encounter." (AC, pg. 7)

Wake turbulence is a concern when very large aircraft (or Boeing 757s) precede lighter aircraft on the ***same runway***. And, although the FAA considers runways that are less than 2500 ft. apart as a single runway, it is clear that lateral (and horizontal) separation can be expected to reduce the effect of wake turbulence. Moreover, with respect to this alternative the runways are offset by 1200 ft. and landing aircraft would be touching down at least 1000 ft. down runway 10C for a minimum separation of over 4200 ft. (from the start of take off roll on 10L) with the 1200 ft. offset. As a practical operational matter these facts will certainly contribute to the mitigation, if not elimination, of the wake turbulence issue as a substantive problem. The conclusion is clear – wake turbulence is not a safety or efficiency problem with respect to this alternative.

Problems with aircraft of the same or similar type do not cause as much difficulty as a heavy aircraft preceding a light aircraft and this is recognized by the reduced separation requirements for like following like on the same runway. Therefore, the real question would be the mix of aircraft that could be expected to use these runways. It is commonplace at airports throughout the nation that certain types of aircraft may be required to use specific runways. This is certainly the case at many existing airports and, as long as other aircraft are distributed to the remaining runways, the overall capacity and delay situation will not be adversely affected. In this case, heavy jets may opt for, or be directed to a different take off runway. Heavy aircraft and Boeing 757s will generally not opt to land on runway 10C but will rather select runway 9C which will give them approximately the same taxi time. And, even if they do not, the number of very large aircraft is considerably smaller

(as a percentage) than the smaller aircraft, so these circumstances will not arise that often in practice; that is, a heavy aircraft taking off with a lighter aircraft landing. Thus, the shortened runway is not unsafe or inefficient

Moreover, the same kind of concerns would apply with respect to the preferred alternative in its final form. That is, 10C is a primary arrival runway and 10L is a primary departure Runway, so aircraft landing on 10C would be exposed to the wake turbulence of aircraft taking off on 10L.

32.6 **FAA Statement**. "There would be no apparent method of routing Runway 10R departures to that runway. Runway 10R departures would need to cross mid-field with the Runway 10R and Runway 10C arrivals, significantly reducing the number of aircraft able to depart on Runway 10L. Under this scenario, it may not be viable to get to and from other runways other than to cross Runway 10L in the last 1/3 of the runway with the departures, and the last 1/4 with the arrivals."

Response. This is exactly the same situation as the situation in the preferred alternative since the projected operational configuration (take off and landing directions) is the same in both alternatives. It does not matter where the runway crossing takes place since the air traffic control situation is precisely the same as far as the take off aircraft is concerned. In other words, the take off aircraft must be held in place until the runway crossing has been accomplished. For that reason, runway crossings present the same operational problems in both this and the preferred alternative. Since they are similar in there operational consequences, there is no a priori reason that one of these situations would be worse than the other. However, and this is the critical point, the shortened runway will certainly be less expensive and will prevent the destruction of the cemeteries.

33. Derivative C3-Alternative C with Runway 10C Shortened to 6900' (3.6.2.3).

33.1 **FAA Statement**. "The Derivative C3 is nearly identical in operational aspects to Derivative C2 with two exceptions. First, with respect to group VI aircraft, Derivative (total length of 6900' ft.) is operationally more restrictive than Derivative (total length of 7500'). Second, in a further shortened Runway 10C/28C

under Derivative C3, wake turbulence issues could be greater than under Derivative C2."

Response. This statement is wrong for the same reasons discussed above with respect to the FAA's erroneous assertion with respect to Derivative C2.

The wake turbulence claim is wrong for the same reasons discussed above with respect to Alternative C3. Moreover, in the situation described above, and as pointed out earlier, it is not even the same runway that is being considered; that is, the runways are offset by 1200 ft. and landing aircraft would be touching down at least 1000 ft. down runway 10C for a minimum separation of over 4800 ft. (from the start of take off roll on 10L) with the 1200 ft. offset. As a practical operational matter these facts will certainly contribute to the mitigation, if not elimination, of the wake turbulence issue as a substantive problem.

Moreover, the same kind of concerns would apply with respect to the preferred alternative in its final form. That is, 10C is a primary arrival runway and 10L is a primary departure runway, so aircraft landing on 10C would be exposed to the wake turbulence of aircraft taking off on 10L.

34. Derivative C4-Alternative C with Runway 10C Shifted 350' South & Shortened to No Less than 10,300' (3.6.2.4).

34.1 FAA Statement. A preliminary Terminal Instrument Procedures (TERPs) analysis was completed as part of the early planning effort. The results of this analysis indicated that there is a small land envelope on a line running east/west between proposed Runway 10C/28C and Runway 10R/28L. Shifting the proposed Runway 10C/28C south would likely force an overlap of the TERPs services for Category II/III approaches to Runway 10R and Runway 10L. This could cause high minimums to be required on these runways impacting the operational efficiency of this runway during poor weather conditions.

Response. The FAA's reasons given for rejecting this alternative are completely without merit from an operations and efficiency standpoint. From any reasonable operational point of view, this is an entirely acceptable alternative that prevents the

destruction of the cemeteries and provides equal if not better operational capabilities than the preferred alternative.

(It is assumed that what is meant in this statement is that the Category II/III approaches mentioned are between runway 10C and runway 10R and not between runway 10R and 10L – otherwise, the statement makes no sense at all). The TERPs issue mentioned in the statement above is also a non-issue. Even if there were some slight overlap in the TERPs requirements, runway 10R is not envisioned as an arrival runway in IFR conditions. In fact, it is designated as a departure runway. Therefore, there is no need to be concerned about this problem.

The rationale presented in this paragraph for rejecting this alternative is a good example of the fact that the FAA has already reached its decision and is merely grasping for reasons to reject viable alternatives.

34.2 FAA Statement. "Initial traffic flow assumptions on the west configuration assume that departing aircraft on Runway 22L would not be airborne prior to crossing over the flight path of Runway 28C arrivals. In Alternative C, the original distance from the threshold of runway to be extended final is 2,400 feet. The movement of runway to the south does not provide a linear addition of length for the departure roll on runway 22L. The movement 350 feet south moves the intersection of the flight path about 450 feet southwest. The more the flight path crosses to the southwest, the greater the possibility of wake turbulence issues."

Response. From any reasonable operational point of view, this is an entirely acceptable alternative that prevents the destruction of the cemeteries and provides equal if not better operational capabilities than the preferred alternative.

The wake turbulence issue that is mentioned is particularly unfounded -- for a number of good reasons. First, according to OMP's own figures (see Runway 12/30 "Proof –of-Concept' Evaluation, Table lll-12, September 11, 2003, Ricondo & Assoc., Inc) VFR West flow occurs about 55% of the time, so the problem would not exist 45% of the time. Secondly, the FAA's own advisory circular on aircraft wake turbulence has the following statement: "A wake encounter is not necessarily hazardous. It can be one or more jolts with varying severity depending upon the

direction of the encounter, weight of the generating aircraft, size of the encountering aircraft, distance from the generating aircraft, and point of vortex encounter. The probability of induced roll increases when the encountering aircraft heading is generally aligned or parallel with the flight path of the generating aircraft." (see Advisory Circular, Aircraft Wake Turbulence, AC No.: 90-23E, Date: Feb. 20, 2002, Initiated by AFS-430). In this particular case, the runways do not intersect and, rather than a parallel flight path, there is a full 50° of offset between the aircraft taking off and the landing aircraft. Third, not only are the heavy aircraft a small percentage of the total number of aircraft to begin with, 22L is itself a relatively short runway, so heavy jet aircraft would not be inclined to select this runway for take off -- under either this alternative or the preferred alternative. Therefore, the number of heavy aircraft that could be expected to use this runway for take offs would be small under any circumstances.

Not only is possible wake turbulence between runways 22L and 28C not a significant problem, it is also true that the proposed shift of the runway 350 ft. south will undoubtedly improve wake turbulence issues between runway 28C and 28R. Unlike the offset that is present for runways 22L and 28C, these two runways (in the preferred alternative) are parallel and therefore subject to the greatest amount of wake turbulence. Although obviously not mentioned in the EIS, all of the proposed objections apply equally well to these runways in the preferred alternative -- including the fact that the take off roll for heavy aircraft on runway 28R starts some distance back from the threshold of 28C. Therefore, any increase in the lateral distance between these runways will improve the wake turbulence situation.

450 ft. of runway would not make any significant difference in respect of wake turbulence impacts between 22L and 28C. Aircraft can vary their position on the runway for take off and/or use a rolling take off with gradually increasing power and this clearly affects the duration and intensity of any wake turbulence that might be experienced in either this or the preferred alternative. Therefore, the method of take off in the preferred alternative could produce a similar wake turbulence issue.

34.3 **FAA Statement.** Moving proposed Runway 10C/28C would require modification to the proposed south storm water detention facility.

Response. Modification of the water detention facility is a trivial issue when the size and expense of this project is considered. Even if this alternative is selected, are we to assume that the destruction of an entire religious cemetery is preferred to a relatively small and inexpensive alteration to an existing water detention basin? If so, a comparison of the costs of the two actions is clearly required (with special regard to the unique circumstances of the cemeteries) and this has not been forthcoming.

34.4 **FAA Statement.** The proposed south cargo area would need to be modified and other areas on the Airport may have to be identified to make the facility requirement analysis.

Response. Modification of the south cargo area is a trivial issue when the size and expense of this project is considered. Even if this alternative is selected, are we to assume that the destruction of an entire cemetery is preferred to a relatively small and inexpensive alteration to the cargo area? If so, a comparison of the costs of the two actions is clearly required (with special regard to the unique circumstances of the cemeteries) and this has not been forthcoming.

34.5 **FAA Statement.** By moving proposed Runway 10C/28C further away from the central terminal area, all aircraft arriving or departing on Runway 10C/28C would experience an increase in the unimpeded taxi time.

Response. Taxiing a mere 350 feet further is a monumentally trivial issue when the size and expense of this project is considered. Even if this alternative is selected, are we to assume that the relocation of an entire cemetery is preferred to this tiny increase in taxi time? If so, a comparison of the costs of the two actions is clearly required (with special regard to the unique circumstances of the cemeteries) and this has not been forthcoming.

34.6 **FAA Statement.** "A modification to the airfield resulting in Runway 10C/28C shifting south of the proposed location in Alternative C could limit the ability of the airfield to support future quadruple approach procedures in IFR conditions, should quadruple IFR procedures be approved in the future by the FAA."

Response. Quadruple IFR approaches are not at all likely any time in the foreseeable future and, at such time as they may be feasible, it is entirely likely that the necessary technology would overcome the reduced separation distance, especially since the separation distance has been reduced by only 350 ft.

35. Derivative C5-Alternative C with Runway 10C Shifted 450' South & Shortened to No Less than 10,300' (3.6.2.5)

35.1 **FAA Statement**. The comments on Derivative C5 are nearly identical to those previously mentioned concerning Derivative C4 with two exceptions. First, the movement 450 feet south (in Derivative C5) moves the intersection of the flight paths about 550 ft. southwest. This is approximately 100 ft. greater than in Derivative C4. The more the flight path crosses to the southwest, the greater the possibility of wake turbulence issues. Second, moving the runway 450 ft. south (compared to alternative C4 at 350 ft.) would further increase the unimpeded travel times.

Response. The wake turbulence issue that is mentioned is particularly unfounded for the reasons mentioned above.

Not only is possible wake turbulence between runways 22L and 28C not a significant problem, it is also true that the proposed shift of the runway 450 ft. south will undoubtedly improve wake turbulence issues between runway 28C and 28R. Unlike the offset that is present for runways 22L and 28C, these two runways (in the preferred alternative) are parallel and therefore subject to the greatest amount of wake turbulence. Although obviously not mentioned in the EIS, all of the proposed objections apply equally well to these runways in the preferred alternative -- including the fact that the take off roll for heavy aircraft on runway 28R starts a couple of thousand feet back from the threshold of 28C. Therefore, any increase in the lateral distance between these runways will improve the wake turbulence situation.

550 ft. of runway would not make any significant difference with respect to wake turbulence between 22L and 28C. Aircraft can vary their position on the runway for take off and/or use a rolling take off with gradually increasing power and this

clearly affects the duration and intensity of any wake turbulence that might be experienced in either this or the preferred alternative. Therefore, the method of take off in the preferred alternative could produce a similar wake turbulence issue. This kind of statement would have to be backed up (at a minimum) by extensive tests and assumptions about the wind direction and duration, and the type and number of aircraft that could be expected to use runway 22L throughout the year. Needless to say, none of these calculations were made to support the statements in the EIS.

Indeed, wake turbulence (if any existed) could be reduced by this change because the two parallel runways in the preferred alternative are now further apart -- in this case by 450 ft.

36. Commenters' Derivatives L-1 and L-2. (3.6.1.3, pg.. 3-65).

36.1 **FAA Statement**. "Commenters' derivatives L-1 and L-2 represent refinements to alternative B presented earlier in this chapter 3. Commenters' derivatives L-1 is a refinement of Alternative B, with the difference being the northernmost runway is moved to a southern position. Commenters' derivative L-2 is also a refinement of alternative B, with the differences being the northernmost runway is moved to the south, and the new runway 10C is moved to the north. As stated previously L-1 and L-2 represent Limited Build derivations of Alternative B."

Response. Neither L-1 nor L-2 is a derivative of Alternative B. In our discussions with the active local controllers from O'Hare, they continually pointed out that Alternative B (or the presently proposed Phase One of the OMP) contains a far north runway that will seriously affect the operation of runways 4L, 32L and 32R. The controllers told us the following concerns about Phase One (Alt B).

The controllers characterized Phase One of the OMP as consisting of adding a far north runway as well as a new parallel runway just south of the current runway 9R. If for any reason the OMP project were to cease at Phase One, the controllers stated that there would be virtually no additional capacity added to the existing operation for the following reasons: The far north runway in the OMP is planned for use as the third arrival runway in all weather conditions. If the far north runway was

opened and used as an arrival runway, the controllers stated that the arrival paths of aircraft landing on this runway would block the departure paths of runways 4L, 32L and runway 32R. The result would be no departures off the airport while this runway was in use. If departures were stopped, a gridlock condition would quickly occur on the taxiways. The only way to fix this problem would be to discontinue the use of the north runway for arrivals so that aircraft could depart. Even when the new departure runway (the east/west parallel south of the current 9R) became operational, there would not be enough departure capacity available to keep a balanced flow of arrivals and departures. For this reason, the far north runway would not be used until later phases of expansion kicked in and additional departure runways became available.

The O'Hare controllers advised us that "L-1" and "L-2" are much better alternatives than Phase One of the OMP. As does Phase One, both options add two new runways to the existing airfield. However, the physical location of these two runways differ from Phase One, and their location allows for both three arrival runways to be in use as well as two to three departure runways in all weather conditions.

In "L-1", the third arrival runway is located on the far south boundary of the field. The location of this runway means that the departure paths for runways 32L, 32R and 4L are unrestricted while the three east-west parallels are available for arrivals. In addition, L-1 adds an additional east-west parallel, just south of the current runway 9R. This runway would also be used for departures, insuring an equal flow of arrivals and departures. An estimated 120 arrivals an hour and 120 departures an hour could be maintained in all weather conditions. Weather delays present today would be eliminated.

"L-2" also provides for a better scenario than an OMP which stopped after Phase One. This plan also locates the third arrival on the south side of the field, providing three arrival runways in all weather conditions and leaving the north runways (32L,

32R and 4L) available for departures. Layout 2 also adds an additional departure runway, but on the north side of the field, just north of the current 9L. While the location of this runway makes it available for departures, it also crosses departure runways 32R and runway 4L.

This creates an intersecting runway operation. A "gap shot" would also exist with 32L departures and 9L arrivals. Because of the intersecting runway operations by positioning this new runway on the north side, both arrival and departures rates would be less than the L-1 option.

As the foregoing clearly shows, it is disingenuous to claim that alternatives L-1 and L-2 are simply a variation of Alternative B. Such a claim allows the unnamed authors of the Final EIS to compare the viable alternatives of L-1 and L-2 to an inefficient alternative (Alternative B) that was purposely selected to make the comparison as unfavorable as possible.

36.2 **FAA Statement**. "As noted by the commentators, these derivatives could potentially, eliminate the need to acquire properties in Elk Grove Village, Bensenville, and the two cemeteries." (3.6.1.3, pg. 3-65).

Response. It will eliminate this need to acquire properties in Elk Grove Village, Bensenville, and the two cemeteries.

36.3 **FAA Statement**. "Western terminal development would not be precluded with these derivatives, but runway 14R/32L would remain and would create a natural barrier to terminal development on the airfield."

Response. The first part of this statement is an admission that the alternatives that we have presented are perfectly compatible with the development of a Western terminal. However, it is precisely the development of this terminal that is being openly questioned in the media and by the airlines that are supposed to fund its development. At this point, it is highly unlikely that the Western terminal will actually be constructed. Retaining Runway 14R/32L means that O'Hare would have a viable crosswind runway when wind and weather conditions would

otherwise dictate a partial or complete closing of the airport. As it is now proposed, the OMP would deprive the airport of this crosswind runway capability, which as the pilots have confirmed, is essential to safe and efficient operations at O'Hare -- particularly during adverse conditions such as bad wind and weather conditions. Loss of the existing crosswind runway capability means the airport will be unable to accept traffic during high crosswind conditions when it safely operates today with more optimal runways, or the airport will have to ratchet down traffic flow during contaminated (e.g., wet or icy) runway conditions. The costs of such closures and/or delays can be extremely high and such closures are sure to happen given the prevailing weather conditions at Chicago. Therefore, it is our firm contention that the ability to keep O'Hare open under adverse wind and weather conditions is a compelling argument in favor alternatives L-1 and L-2.

36.4 **FAA Statement**. "Due to parallel runway spacing, during weather conditions below a 4500 ft. ceiling and seven statute miles visibility, the operating configurations resulting from these derivatives would be limited to two arrival runways thus limiting the arrival capacity of the airfield to approximately 76 to 80 per hour which is equivalent to the IFR rate today"

Response. This statement is wrong. Existing regulations allow triple instrument approaches if runway separation is 5000 ft. (with no special equipment) and 4300 ft if: "A high- resolution color monitor with alert algorithms, such as the final monitor aid or that required in the precision runway monitor program shall be used to monitor approaches where: Triple parallel runway centerlines are at least 4300 but less than 5000 ft. apart and the airport field elevation is less than 1000 ft. MSL."(ATC 7110.65P, par. 5-9-7).

In this case there is over 7700 ft. separation between the central and northern approach runways and 4300 ft. between the central and southern runway; therefore, triple instrument approaches would be available for this alternative with the installation of the appropriate equipment. The air traffic controllers at O'Hare have advised us that this particular configuration would allow triple approaches in IFR conditions and this would result in a capacity of approximately 120 per hour.

The controllers told me that in "L-1," the third arrival runway is located on the far south boundary of the field. They stated that the location of this runway means that the departure paths for runways 32L, 32R and 4L are unrestricted while the three east-west parallels are available for arrivals. In addition, L-1 adds an additional east-west parallel, just south of the current runway 9R. This runway would also be used for departures, insuring an equal flow of arrivals and departures. The controllers stated that an estimated 120 arrivals an hour and 120 departures an hour could be maintained in all weather conditions and weather delays present today would be eliminated.

36.5 **FAA Statement**. "Reducing the length of runway 10R/28L by approximately 1500 feet and shifting it to the east would cause the Runway Protection Zone for runway 10R to infringe on areas east of the Airport. At only 6095 ft. in length, this runway would not be used by as many aircraft as the FAA has projected for the Preferred Alternative, thereby making this runway only marginally useful and shifting much of that runway's traffic to other runways."

Response. This conclusory statement simply assumes that any infringement on the west or east of the airport would be equal in terms of the costs involved. This is manifestly not true since it is on the west of the airport that the most serious infringements will take place. The RPZ on the east would not require the destruction of any homes or any religious cemeteries and may be suitable for an "avigation easement" such as are proposed west of York Road.

The second part of the statement is wrong. Runway 10R is proposed principally as an arrival runway and not as a departure and arrival runway. As such, the principal requirements for this runway would be landing requirements for aircraft and these are considerably less restrictive than take off requirements. Using the table that was developed in the original OMP concept submitted to the FAA in February 2003 (pg. ll-7, table ll-5), the only aircraft that would be precluded from landing on this runway under restrictive landing conditions (i.e., wet runway, maximum landing weight) would be the B737-800, the B747-400, and the A380 (proposed).

Finally, the L-1 alternative discussed the option of extending the length of the runway to the west (beyond the 6095 foot length) for longer length — without the need to destroy any homes or the religious cemeteries.

36.6 **FAA Statement.** "Both Alternative L-1 and L-2 retain the 'runway triangle' on the north side of the airport (current Runways 9L/27R, 4L/22R and 14R/32L) which would never allow the airport to achieve the efficiencies of the proposed OMP. This is because all three of those runways are 'dependent' upon each other, intersecting in ways that limit operations, and increase controller workload. In essence, any such proposal can only fine-tune the efficiency of today's airfield."

Response. The local O'Hare controllers do not agree with this statement at all, particularly with respect to alternative L-1. The controllers told me that in "L-1," the third arrival runway is located on the far south boundary of the field. They stated that the location of this runway means that the departure paths for runways 32L, 32R and 4L are unrestricted while the three east-west parallels are available for arrivals. In addition, L-1 adds an additional east-west parallel, just south of the current runway 9R. They said this runway would also be used for departures, insuring an equal flow of arrivals and departures. An estimated 120 arrivals an hour and 120 departures an hour could be maintained in all weather conditions.

Moreover, retaining Runway 14R/32L means that O'Hare would have a viable crosswind runway when wind and weather conditions would otherwise dictate a partial or complete closing of the airport. As it is now proposed, the OMP would deprive the airport of this crosswind runway capability, which as the pilots have confirmed, is essential to safe and efficient operations at O'Hare -- particularly during adverse conditions such as bad wind and weather conditions. Loss of the existing crosswind runway capability means the airport will be unable to accept traffic during high crosswind conditions when it safely operates today with more optimal runways, or the airport will have to ratchet down traffic flow during contaminated (e.g., wet or icy) runway conditions. The costs of such closures and/or delays can be extremely high and such closures are sure to happen given the prevailing weather conditions at Chicago. Therefore, it is our firm contention that,

in addition to the controller's arguments presented above, the ability to keep O'Hare open under adverse wind and weather conditions is also a compelling argument in favor alternatives L-1 and L-2.

36.7 **FAA Statement.** "Due to the length of proposed runways and their location, intersection departures would not be viable nor could Land and Hold Short Operations (LAHSO) be utilized. Therefore, every runway crossing would be across an active runway, thereby reducing efficiency."

Response. This statement is wrong. Under both proposals L-1 and L-2 Runway 9R/27L would be extended to 13,150 ft. Local O'Hare controllers confirm that the majority of Land and Hold Short Operations can be accomplished with 6000 ft. of runway. The extension of runway 9R/27L allows for Land and Hold Short Operations in both directions on 9R/27L with 6235 ft. in the easterly direction and 6915 ft. in the westerly direction prior to the intersection of runway14R/32L. Since the first part of the statement is incorrect, the second part is wrong as well.

37. Derivative L-1 -- East Flow (pg. 3-68, par.1).

37.1 **FAA Statement.** This configuration would be comparable To Plan X (use of the specific set of runways as described in the Draft EIS) that is used today. See Appendix D, Simulation Modeling, Section D.3. It would provide marginal increases in the hourly operational throughput over Plan X. However, this configuration would neither reduce existing delays nor accommodate anticipated growth in aviation activity at the airport at acceptable levels of the delay.

Response. The plan is not directly comparable to plan X since there are two extra east-west runways and one of these can be used for continual departures, while the other one will provide another arrival runway for the majority of aircraft that would be using O'Hare. Moreover, the statement that it would provide marginal increases in the hourly operational throughput over plan X is not supported by any analytical model, simulation, or even hard numbers from expert opinion. It is also directly contradicted by the FAA analysis that was produced for the year 2009. In that analysis, the FAA compared the no action alternative (that is, the field as it exists and is operated today) with Phase One of the projected OMP project. Phase One in

the FAA analysis also consists of only four east-west runways, but in positions that are vastly inferior to L-1. The tower controllers stated that "L-1" and "L-2" are much better alternatives than Phase One of the OMP. As does Phase One, both options add two new runways to the existing airfield. However, the physical location of these two runways differ from Phase One, and their location allows for both three arrival runways to be in use as well as two to three departure runways in all weather conditions.

In its own Phase One analysis, the FAA concluded that average delay at the Airport would be reduced from 16.6 minutes to 10.8 minutes -- even with, as the above quotation plainly demonstrates, the runways located in clearly inferior positions. Therefore, the assertion that alternative L-1 would not reduce existing delays contradicts the FAA's own earlier analysis and the expert opinion of the local controllers. In fact, L-1 would reduce delay by a greater amount than the proposed Phase One.

38. Derivative L-1 -- West Flow (pg. 3-68, par.2).

38.1 **FAA Statement.** This configuration would be comparable To Plan W (use of a specific set of runways as described in the Draft EIS) that is used today. See Appendix D, Simulation Modeling, Section D.3. It would provide benefits in hourly operational throughputs over plan W. Although this specific configuration would provide modest delay benefits, it would not accommodate anticipated growth in aviation activity at the airport of acceptable levels of delay.

Response. The plan is not directly comparable to plan W since there are two extra east-west runways and one of these can be used for continual departures, while the other one will provide another arrival runway for the majority of aircraft that would be using O'Hare. Moreover, the statement that it would provide marginal increases in the hourly operational throughput over plan W is not supported by any analytical model, simulation, or even hard numbers from expert opinion. It is also directly contradicted by the FAA analysis that was produced for the year 2009. In that analysis, the FAA compared the no action alternative (that is, the field as it exists

and is operated today) with Phase One of the projected OMP project. Phase One in the FAA analysis also consists of only four east-west runways, but in positions that are vastly inferior to L-1 -- as the following quote from active O'Hare controllers clearly shows: " 'L-1' and 'L-2' are much better alternatives than Phase One of OMP. As does Phase One, both options add two new runways to the existing airfield. However, the physical location of these two runways differ from phase one, and their location allows for both three arrival runways to be in use as well as two to three departure runways in all weather conditions."

In its own Phase One analysis, the FAA concluded that average delay at the Airport would be reduced from 16.6 minutes to 10.8 minutes -- even with, as the above quotation plainly demonstrates, the runways located in clearly inferior positions. Therefore, the assertion that alternative L-1 would not reduce existing delays contradicts the FAA's own earlier analysis and the expert opinion of the local controllers. In fact, L-1 would reduce delay by a greater amount than the proposed Phase One.

39. Derivative L-2 -- East Flow (pg. 3-68, par.3).

39.1 **FAA Statement.** "This configuration would be comparable To Plan X (use of the specific set of runways as described in the Draft EIS) that is used today. See Appendix D, Simulation Modeling, Section D.3. However, due to the runway interaction between arrivals and departures, this configuration would perform worse than the existing airfield and would not be used.

Response. To claim that this configuration would perform worse than the existing airfield, when there are two extra runways, defies common sense and logic. Moreover, the runways would be in more suitable locations as the controllers stated to me in written comments on L-1 and L-2: " 'L-1' and 'L-2' are much better alternatives than Phase One of OMP. As does Phase One, both options add two new runways to the existing airfield. However, the physical location of these two runways differ from phase one, and their location allows for both three arrival

runways to be in use as well as two to three departure runways in all weather conditions."

There is no analytical model, simulation model, or even expert opinion to back this up. Moreover, in its own Phase One analysis, the FAA concluded that average delay at the Airport would be reduced from 16.6 minutes to 10.8 minutes -- even with, as the above quotation plainly demonstrates, the runways located in clearly inferior positions. Therefore, the assertion that alternative L-2 would actually perform worse than the existing airfield contradicts the FAA's own earlier analysis and the expert opinion of the local controllers. In fact, not only would L-2 perform better than the existing airfield, it would reduce delay by a greater amount than the proposed Phase One.

40. Derivative L-2 -- West Flow (pg. 3-68, par.4).

40.1 **FAA Statement.** "This configuration would be comparable To Plan W (use of the specific set of runways as described in the Draft EIS) that is used today. See Appendix D, Simulation Modeling, Section D.3. However, due to the runway interaction between arrivals and departures, this configuration would perform worse than the existing airfield and would not be used."

Response. This is another incredible and unsupported erroneous statement. To claim that this configuration would perform worse than the existing airfield, when there are two extra runways, defies elementary logic. Moreover, the runways would be in more suitable locations. The local O'Hare controllers told me that " "L-1" and "L-2" are much better alternatives than Phase One of the OMP. As does Phase One, both options add two new runways to the existing airfield. However, the physical location of these two runways differ from phase one, and their location allows for both three arrival runways to be in use as well as two to three departure runways in all weather conditions.

There is no analytical model, simulation model, or even expert opinion to back up FAA's statement. Moreover, in its own Phase One analysis, the FAA asserts that

average delay at the Airport would be reduced from 16.6 minutes to 10.8 minutes -- even with, as the above quotation plainly demonstrates, the two extra East-West runways located in clearly inferior positions. Therefore, the assertion that alternative L-2 would actually perform worse than the existing airfield contradicts the FAA's own earlier analysis and the expert opinion of the local controllers. In fact, not only would L-2 perform better than the existing airfield, it would reduce delay by a greater amount than the proposed Phase One.

41. A Potential Derivative which Combines Commenters' Derivatives L-1 & L-2 (pg. 3-68, par.5).

41.1 **FAA Statement.** "A combined airfield configuration which might include some or all of the components of the L-1 and L-2 configurations presented by the Commenters' would yield many of the same problems listed above. Further, the complexities brought about by all of the interdependencies, the inability to perform triple approaches in all weather conditions, and potential performance issues join IFR conditions make further detailed analysis of such a combined derivative by FAA unnecessary."

Response. The local O'Hare controllers disagree with this unsubstantiated and non-analytical statement. The local O'Hare controller's told me that "L-1" and "L-2" are much better alternatives than Phase One of OMP. As does Phase One, both options add two new runways to the existing airfield. However, the physical location of these two runways differ from Phase One, and their location allows for both three arrival runways to be in use as well as two to three departure runways in all weather conditions.

Moreover, both L-1 and L-2 propose that Runway 14R/32L be retained. This means that O'Hare would continue to have a viable crosswind runway when wind and weather conditions would otherwise dictate a partial or complete closing of the airport. As it is now proposed, the OMP would deprive the airport of this crosswind runway capability, which as the pilots have confirmed, is essential to safe and efficient operations at O'Hare -- particularly during adverse conditions such as bad

wind and weather conditions. Loss of the existing crosswind runway capability means the airport will be unable to accept traffic during high crosswind conditions when it safely operates today with more optimal runways, or the airport will have to ratchet down traffic flow during contaminated (e.g., wet or icy) runway conditions. The costs of such closures and/or delays can be extremely high and such closures are sure to happen given the prevailing weather conditions at Chicago. Therefore, it is our firm contention that, in addition to the controller's arguments presented above, the ability to keep O'Hare open under adverse wind and weather conditions is also compelling argument in favor alternatives L-1 and L-2.

42. Conclusion on Commenters' Derivatives L1 and L2 (pg. 3-68, par.6).

42.1 **FAA Statement.** "In particular, the FAA finds that the Commenters Derivatives L1 and L2, which represent refinements to Alternative B presented in detail earlier in this chapter 3, are most likely to yield less delay savings than Alternative B."

Response. Neither L-1 nor L-2 is a derivative of Alternative B. In our discussions with the active local controllers from O'Hare, they continually pointed out that Alternative B (or the presently proposed Phase One of the OMP) contains a far north runway that will seriously affect the operation of runways 4L, 32L and 32R. The controllers told me that "L-1" and "L-2" are much better alternatives than Phase One of OMP. As does Phase One, both options add two new runways to the existing airfield. However, the physical location of these two runways differ from Phase One, and their location allows for both three arrival runways to be in use as well as two to three departure runways in all weather conditions.

The controllers told me that in "L-1," the third arrival runway is located on the far south boundary of the field. The location of this runway means that the departure paths for runways 32L, 32R and 4L are unrestricted while the three east-west parallels are available for arrivals. In addition, L-1 adds an additional east-west parallel, just south of the current runway 9R. This runway would also be used for departures, insuring an equal flow of arrivals and departures. An estimated 120

arrivals an hour and 120 departures an hour could be maintained in all weather conditions. Weather delays present today would be eliminated.

The controllers also told me that "L-2" also provides for a better scenario than an OMP which stopped after Phase One. This plan also locates the third arrival on the south side of the field, providing three arrival runways in all weather conditions and leaving the north runways (32L, 32R and 4L) available for departures. Layout 2 also adds an additional departure runway, but on the north side of the field, just north of the current 9L. While the location of this runway makes it available for departures, it also crosses departure runways 32R and 4L.

As these comments clearly show, it is disingenuous to claim that Alternatives L-1 and L-2 are simply a variation of Alternative B. Such a claim allows the unnamed authors of the Final EIS to compare the viable alternatives of L-1 and L-2 to an inefficient alternative (Alternative B) that was purposely selected to make the comparison as unfavorable as possible. For example, using the controller estimates for IFR and VFR throughput with the four runways in the L-1 location, the difference in average yearly delay between the preferred alternative and our suggested alternative (at 3500 operations per day) would be approximately 3.7 minutes; and this would constitute "significant delay reduction" by anyone's standards and certainly much more than Alternative B.

Moreover, both L-1 and L-2 propose that Runway 14R/32L be retained. This means that O'Hare would continue to have a viable crosswind runway when wind and weather conditions would otherwise dictate a partial or complete closing of the airport. As it is now proposed, the OMP would deprive the airport of this crosswind runway capability, which as the pilots have confirmed, is essential to safe and efficient operations at O'Hare -- particularly during adverse conditions such as bad wind and weather conditions. Loss of the existing crosswind runway capability means the airport will be unable to accept traffic during high crosswind conditions when it safely operates today with more optimal runways, or the airport will have to

ratchet down traffic flow during contaminated (e.g., wet or icy) runway conditions. The costs of such closures and/or delays can be extremely high and such closures are sure to happen given the prevailing weather conditions at Chicago. Therefore, it is our firm contention that, in addition to the controller's arguments presented above, the ability to keep O'Hare open under adverse wind and weather conditions is also a compelling argument in favor alternatives L-1 and L-2.

43. Derivative M--No Action with a New South Runway Only (4300' South from Existing Runway 9R/27L) (Section 3.6.1.4).

43.1 **FAA Statement.** "The proposed runway layout of this alternative provides the capability for quadruple approaches using three parallel runways and a converging runway. Quadruple approaches can only be utilized a limited portion of the time, namely in good weather during East Flow operations. However, arrivals to runway 9R would be limited to approximately 10 per hour to maintain a balanced airfield."

Response. Discussions with local air traffic controllers at O'Hare show conclusively that triple approaches are all that is needed to handle the VFR capacity at O'Hare. While there would be a dependency between runway 10 and 4R, it would generally be supposed that runway 4R would be used as an overflow arrival runway to assist in either arrivals or departures during peak traffic periods. The controllers told me that in "L-1," the third arrival runway is located on the far south boundary of the field. The location of this runway means that the departure paths for runways 32L, 32R and 4L are unrestricted while the three east-west parallels are available for arrivals.

Alternative M locates the new East-West runway 4300 ft. to the south just as is proposed in L-1, so this part of the controller statement would apply equally to both alternatives L-1 and M. The second half of the statement that arrivals to runway 9R would be limited to approximately 10 per hour makes no sense whatsoever. There are still three departure runways available and runway 4R could be used as a departure runway if needed. Therefore, there would be no need to limit the number

of arrivals to runway 9R. It seems as if this number has been plucked from thin air to provide a rationale for rejecting this alternative.

43.2 **FAA Statement.** "Due to the converging approach in VFR East Flow, high weather minimums would apply. The VFR conditions are generally defined as 1000 foot ceiling and a visibility of three nautical miles. For this configuration (VFR East Flow), the weather minimums would require a ceiling of 2500 ft. and a visibility of at least 7 nautical miles to protect for the missed approach and to provide separation from Runway10R arrivals and Runway 4R arrivals."

Response. Discussions with local air traffic controllers at O'Hare show conclusively that triple approaches are all that is needed to handle the VFR capacity at O'Hare. In the controller's own words: "In 'L-1', the third arrival runway is located on the far south boundary of the field. The location of this runway means that the departure paths for runways 32L, 32R and runway 4L are unrestricted while the three east-west parallels are available for arrivals."

Alternative M locates the new East-West runway 4300 ft. to the south just as is proposed in L-1 so this part of the controller statement would apply equally to both alternatives L-1 and M. Therefore, the fourth approach to runway 4R would not be needed to sustain capacity demands so that ordinary VFR weather minimums would apply.

43.3 **FAA Statement.** "Triple approaches for IFR East or IFR West Flow would not be allowed. FAA Order 7110.65 requires 5000 ft. between parallel runways for simultaneous triple approaches. This limitation restricts the hourly arrival throughput of this alternative to a level equivalent to the existing airfield."

Response. This statement is wrong. Existing regulations allow triple instrument approaches if runway separation is 5000 ft. (with no special equipment) and 4300 ft. if: "A high- resolution color monitor with alert algorithms, such as the final monitor aid or that required in the precision runway monitor program shall be used to monitor approaches where triple parallel runway centerlines are at least 4300 but less than 5000 ft. apart and the airport field elevation is less than 1000 ft. MSL." (ATC 7110.65P, par. 5-9-7).

In this case there is over 5000 ft. separation between the central and northern approach runways and 4300 ft. between the central and southern runway; therefore, triple instrument approaches would be available for this alternative with the installation of the appropriate equipment. The air traffic controllers at O'Hare have advised us that this particular configuration would allow triple approaches in IFR conditions and this would result in a capacity of approximately 120 per hour. The following is a direct quotation from the controller's written comments provided to me: "In 'L-1,' the third arrival runway is located on the far south boundary of the field. The location of this runway means that the departure paths for runways 32L, 32R and runway 4L are unrestricted while the three east-west parallels are available for arrivals. Therefore, throughput for this alternative would far exceed that of the existing airfield.

43.4 **FAA Statement.** No quadruple arrivals in either good weather or poor weather would be available under this alternative if the far south proposed runway is shifted exactly 5000 feet south of existing Runway 9R/27L. The Runway Safety Areas (RSA's) for Runway 28L and Runway 4R would overlap. In order for quadruple rivals to be available using three parallel runways and a converging runway, the proposed south runway would have to be shifted further west potentially requiring additional property acquisition in Bensenville.

Response. This statement is incorrect. First, the runway could be shortened by 1000 ft. in order to prevent the overlap problem. In this case the runway would be primarily an arrival runway, and still would be able to accommodate the majority of aircraft using O'Hare. Second, the runway could be shifted to the west with some acquisition of property. The FAA has a requirement to examine these impacts and compare them to the impacts of the full OMP before summarily rejecting this alternative.

43.5 **FAA Statement.** Land and Hold Short Operations (LAHSO) would be required with the Rejected Landing Procedure (RLP). Today, no LAHSO operations with an RLP have been approved nationwide.

Response. It is difficult to make sense of the statement. In the first place, the statement is completely nonspecific as to which runway and where the procedure

would be required. In the second place, if it is meant to imply that the FAA will never approve such a procedure, then it is clearly up to the FAA to issue such a ruling. If not, then it is entirely possible that this procedure could be approved.

43.6 **FAA Statement.** This alternative would perform worse than alternatives B, C, D and G.

Response. No quantitative analysis is offered to back up this statement. As shown in the affidavit of Brian Campbell, every alternative – including alternatives B, C, D and G— will face rising delays to unacceptable levels and will require demand management to control levels to whatever level of delay is deemed acceptable or desirable.

Additionally, the other alternatives all contain one or more extra runways and therefore, a proper analytical comparison would have to factor in the cost of the extra runways versus the gains in capacity and/or the decrease in delay.

43.7 **FAA Statement**. Locating the proposed **southern** runway at 5000 ft. from the existing runway would require additional land acquisition to the south. Specifically, the following facilities would require relocation:

- United States Post Office,
- Detention basins located to the south of the Post Office,
- Irving Park Road,
- Railroad Yard.

Response. There is no evidence presented that it would be necessary to move the rail yard. Preliminary GIS photo analysis indicates that the physical runway need not use the rail yard. As to the movement of the other facilities, the FAA proposes to move these facilities for the full build OMP-Master Plan.

43.8 **FAA Statement.** In addition to the land in the southwest quadrant proposed to be acquired in the preferred alternative, property would have to be acquired south of Green Street in Bensenville.

Response. No rationale or evidence is given as to why this land would be required in addition to the preferred alternative. If this alternative were selected, then only the land associated with it would have to be acquired. The FAA has a requirement to examine the cost of these impacts and compare them to the impacts of the full OMP before offering this as a reason to reject this alternative. The FAA has failed to do.

I declare under penalty of perjury that the foregoing is true and correct to the best of my information, knowledge and belief.

Kenneth Fleming
Kenneth Fleming

SUBSCRIBED and SWORN TO before me
this 6th day of September 2005

Patricia Lee McAllister
Notary Public

NOTARY PUBLIC-STATE OF FLORIDA
Patricia Lee McAllister
Commission # DD362932
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FAA AIR TRAFFIC WORKING GROUP – GREAT LAKES REGION

ANALYSIS AND RESPONSE TO COMMENTS PRESENTED

IN THE AFFIDAVIT OF KENNETH FLEMING

As requested, we have studied the 37-page affidavit of Kenneth Fleming, dated September 5, 2005. This affidavit was part of a package of comments submitted to the FAA in response to the agency's invitation for public comments on portions of the Final Environmental Impact Statement and the FAA's proposed resolution of religious liberty issues. For ease of reference, our analysis of his comments will track his affidavit, and will indicate our specific response to his assertions through our adoption of the same paragraph numbering convention used by Mr. Fleming. Some assertions require no comment, and others that fall beyond the scope of our assignment are answered elsewhere in response to comments.

¶ 1-9 Mr. Fleming has a Ph.D in Economics, served as a Professor of Economics at the Air Force Academy, is a former Air Force pilot, and presently is with Embry-Riddle Aeronautical University. We find no need to comment on these qualifications, other than to note that Mr. Fleming's views of various O'Hare runway layout alternatives and derivatives suggest an approach to air traffic issues starkly different from those employed by the FAA. Mr. Fleming would operate O'Hare in ways that are contrary to existing FAA air traffic procedures. His approach presents operational issues which would require the FAA to impose severe reductions in operations in order to assure an adequate level of safety. He also appears to have an incomplete understanding of how the Selected Alternative is designed to be implemented. Each of these criticisms is identified in detail in our analysis of his comments below.

¶ 13 Mr. Fleming declares that Alternative C, the Selected Alternative, is "the least prudent and feasible alternative" and that there are other "viable, prudent and feasible alternatives" that will accomplish the agency's stated purpose and need better than Alternative C and without the destruction of the cemeteries. We note that the FEIS, as a result of detailed and comprehensive modeling, has demonstrated that the Selected Alternative performs far better than any other alternative or derivative considered.

¶ 14 Mr. Fleming's overall approach is to focus on the availability of "Blended Alternatives" which include a limited number of runway and taxiway facilities combined with the use of congestion management to impose capacity restrictions in order to maintain delays at acceptable levels. The FEIS discussed use of such Blended Alternatives, and contained the FAA's conclusion that such an approach would not meet the purpose and need of the proposed action.

¶ 15 We do not dispute the fact that Blended Alternatives are in use at some airports. Recently, a Blended Alternative including congestion management was approved for Los Angeles because the airport sponsor was unwilling to make the kind of major improvements Chicago wishes to do at O'Hare. Congestion management is in use at LaGuardia and Washington National because the physical confines of those airports preclude major improvements as a matter of basic feasibility. It has long been the FAA's policy, as expressed in the interim congestion management order for O'Hare and in other documents that, given its statutory duties to promote air commerce, congestion management is an appropriate device only where absolutely necessary and as an interim measure until long-term delay solutions can be implemented.

¶ 17 Mr. Fleming uses the 2003 and 2004 Terminal Area Forecast and contends that Phase One of the Selected Alternative will reach gridlock on opening day, and that the full build-out of the Selected Alternative will produce similar results within a year of its completion. The FAA has responded to this assertion in its FEIS response to comments, see Appendix U, at U.4-534.

Mr. Fleming has provided no new information to cause the FAA to reassess its response to this assertion.

¶¶ 18-20 Mr. Fleming asserts that he has met with several air traffic controllers who have expressed serious concerns about the safety, efficiency, and utility of the Selected Alternative. We are aware that several individuals who are or were controllers have expressed their own personal views about this project. Although individuals are entitled to their own personal opinions, we do not believe such expressions of concern are entitled to any weight, since Mr. Fleming has left these controllers unnamed and has not provided their Air Traffic operational background.

Throughout the Environmental Impact Statement (EIS) process, the FAA had a team of Air Traffic Controllers (known as the Air Traffic Working Group) assigned to the evaluation of the alternatives evaluated. Representatives from both Management and the National Air Traffic Controllers Association (NATCA) from the O'Hare Air Traffic Control Tower, Chicago Terminal Radar Approach Control (TRACON) facility and the Chicago Center participated on this team. They invested over 1,400 hours reviewing assumptions, iterative model runs, and results of the detailed computer simulation modeling conducted for Alternatives C, D, G and the No Action alternative. Upon conclusion of this process, the FAA Air Traffic Working Group determined that the modeling represented, "a reasonable representation of how the proposed design year airport layouts would be operated, if implemented at O'Hare International Airport." See, Attachment D-3 FAA Air Traffic Memo in the FEIS for a summary of the Air Traffic Assessment of the modeled alternatives. In addition, the alternatives submitted during the EIS process, as well as derivatives of Alternative C, were thoroughly evaluated by a subgroup of the FAA's Air Traffic Work Group.

¶ 23 Contrary to Mr. Fleming's assertion that Derivatives L-1 and L-2 were given cursory treatment because neither satisfied purpose and need, the FAA identified a number of flaws in each of those options. It is also true that a number of alternatives and derivatives that could not provide meaningful delay reduction for unconstrained demand were rejected. The FAA has

applied consistent criteria in its consideration of alternatives and derivatives for both environmental review and for purposes of satisfying its obligations under the Religious Freedom Restoration Act.

¶ 24 Mr. Fleming criticizes the FAA's decision to conduct its environmental analysis with a planning horizon of build-out plus five years. This is a standard planning horizon for the purpose of evaluating environmental impacts under the National Environmental Policy Act, and meets with the approval of the Environmental Protection Agency which is charged by law with grading each EIS.

¶ 25 At some point following the full build out and implementation of the Selected Alternative, it is likely that additional steps will be necessary to deal with issues of delay that will appear. The development of new technology that might address these issues that far in the future is very difficult to predict. We do not know at this point how the FAA will respond to that challenge if and when it appears. Looking backward to 25 or 30 years ago, the technology that was in use then seems primitive compared to that in use today. But, between now and some point in the future when O'Hare delay will again require a response, the Selected Alternative will enable an increase in operations to 1,194,000 annually with an average annual delay of 5.8 minutes per operation. That delay level is approximately one-third of the delays experienced today. This reduction in delay is also accompanied by a concurrent increase in approximately 220,000 additional annual operations and nearly 11 million annual total passengers. In addition, the FAA believes that when approximately 1.4 million operations occur, the Airport would have between 13 and 16 minutes of average annual delay which is similar to the delays experienced today. Of course, the Airport would be handling nearly 40% more operations than today. It has never been the policy of the FAA to forego such benefits of airport improvement over the reasonably foreseeable future because at some point in the more distant future other solutions may be required for the challenges of tomorrow.

¶ 31 Here we respond to Mr. Fleming's criticism of the FAA's analysis concerning Derivative C-1, the Selected Alternative without Runway 10C/28C which is planned to be placed directly over the present site of St. Johannes Cemetery.

Most importantly, Mr. Fleming seems to have difficulty with the concept that an airport operating with four arrival streams will have fewer delays than an airport handling the same amount of traffic with only three arrival streams. By eliminating Runway 10C/28C which is intended to be used as an arrival runway in all weather conditions and in both east and west flow, there would be a greater degree of delay in operating the airport. Notably, good weather conditions allowing quadruple approaches exist more than 50 percent of the time at O'Hare. This is a very significant benefit, as the modeling for Alternative C demonstrated.

It is correct that the FAA does not have procedures developed, as of yet, for quadruple IFR approaches at O'Hare. However, quadruple VFR approaches have been developed and implemented by the FAA for use at other airports. These same procedures are proposed by the Air Traffic Workgroup for Alternative C. When technology and procedures are developed at some point in the future, Alternative C could provide the capability for IFR quadruple approaches.

Mr. Fleming does not appear to take issue with the FAA statement that C-1, when operated in east flow, allows only two departure streams, and that IFR weather reduces the airport's departure capacity from 120 per hour to only 90 per hour, a significant reduction from that available with Alternative C.

To operate Derivative C-1 most efficiently in the absence of Runway 10C/28C, which as noted earlier was intended as an arrival runway in all conditions, Runway 10L/28R must be converted from a departure to an arrival runway in west flow conditions. This is because the intersecting paths of Runway 22L departures and arrivals on Runway 28L would require such large distances in separation between aircraft as to produce severe delays in both departures and arrivals on the south side of the airport.

However, assigning arrivals to Runway 28R in west flow means that all departures originally intended for that runway must now be assigned to Runway 28L. There are numerous occasions at O'Hare today when an aircraft captain will reject a runway assignment for takeoff (Runway 4L) because she or he prefers or requires a runway longer than 7,500 feet. We expect some controller assignments for aircraft takeoff from Runway 28L, also at 7,500 feet in length, to be rejected for the same reasons (and by the same pilots). There is no way to predict how many pilots will reject this runway, but operational experience shows that when longer runways are available at an airport, pilots will request them. Under these circumstances, the alternatives are: lengthen Runway 10R/28L by extending it into Bensenville so that it will become universally acceptable, allow those aircraft to use the longer runways on the north side of the field for takeoff, which reduces the efficiency of the airport and increases delays, or reduce the arrival rate on Runway 28R to accommodate the requests for a longer takeoff runway.

Permitting a pilot to use a runway other than the one assigned "imbalances" the airport by placing extra demand on departure runways north of the terminal, and by reducing the departure rate as aircraft originally intended to depart from Runway 28L reject that assignment and use Runway 27L instead. The departure rate is reduced because controllers assign aircraft to specific departure runways based on the aircraft's destination. For example, in Derivative C-1 operating in west flow, traffic headed to the east (Cleveland, Pittsburgh, New York, Boston or Washington) would be assigned Runway 22L. Immediately upon departure, those aircraft are turned east. Traffic headed to the south (St. Louis, Memphis, Atlanta, or Miami) would be assigned Runway 28L, and turned to the south several miles after departure. Westbound traffic (Denver, Phoenix, Los Angeles, Las Vegas) would be assigned Runway 27L for departure. But, when an Atlanta-bound aircraft rejects Runway 28L because of its seemingly inadequate length and gets in the queue with westbound traffic using Runway 27L, that Atlanta flight on Runway 27L requires special handling from tower controllers. The Atlanta flight must be inserted into the stream of departure traffic that used Runway 28L and are all heading south. Not only must the tower controller insert the Atlanta flight into a new departure stream; she or he must also insure that other departures to the south on Runway 28L, such as one to St. Louis, are held on the ground so that the Atlanta-based flight can be turned so that it will be to the east of the flight path of the St. Louis-based aircraft. Ensuring this type of adequate separation between aircraft is likely to adversely impact the departure rate of all O'Hare runways, thereby impairing the overall efficiency of the airport.

Similar inefficiencies afflict Derivative C-1 in east flow. As noted earlier, this operating configuration allows only two departure streams in both VFR and IFR conditions, thereby reducing capacity and increasing delays..

In addition to these long-term limitations, Derivative C-1 deprives O'Hare of a critical runway during the build-out of the overall project. As two runways are decommissioned, and new ones constructed, the sequence in which these events occur is critical to maintain efficient operations. Runway 10C/28C is planned to be built early in the overall process of implementing the Selected Alternative. Its absence would cause significant short-term delay issues, along with all the other permanent limitations that would preclude this Derivative from achieving a level of delay reduction necessary to achieving the goals of proposed action.

¶¶ 32-33 In Derivatives C-2 and C-3, the FAA considered the option of shortening Runway 10C/28C from 10,800 feet to 7,500 feet and 6,900 feet, respectively, in order to avoid St. Johannes Cemetery. Mr. Fleming's comments on both derivatives are similar, and so we have chosen to respond to his analysis in the same consolidated fashion.

Mr. Fleming seriously misunderstands the operational consequences of shortening a critical arrival runway by either 2,100 feet or 3,900 feet. It is true that there are airports where the longest runway is only 7,500 or 6,900 feet (Washington National and La Guardia, for example), and such runways are regularly used in all conditions. It is also true, however, that the availability of longer runways, especially in adverse weather conditions, means that in the real world, airline pilots will reject the shorter runway and demand to land on a longer one. We know this from our experience at O'Hare today. Adoption of Derivative C-2 would cause aircraft that could have landed on Runway 10C/28C at its originally designed length of 10,800 feet to reject that runway in its shortened state. Instead, some pilots would request a longer runway, which is only available on the north side of the airfield. These requests, especially in adverse weather, will interrupt the smooth flow of arrival traffic from the several navigational fixes some 60-80 miles from O'Hare. At each of those points, controllers line up aircraft for landing on a specific runway at O'Hare. Because Runways 10C/28C and 9C/27C are both intended to serve constant streams of arrival traffic, the line of aircraft for a particular O'Hare runway may extend almost 100 miles, to the east or west of the airport, depending on wind conditions. When a pilot reaches the navigational fix where her or his aircraft is positioned with others for arrival on a shortened Runway 28C, and rejects that assignment in favor of Runway 27C because of its greater length, the constant stream of arrivals is severely disrupted. The controller working approaches to Runway 28C on the south side of the airport must coordinate with her or his counterpart working the north side to insert the non-conforming aircraft into that other approach stream for Runway 27C. In addition to provoking serious controller workload concerns, the reduced ability to segregate arrivals in conforming streams of traffic reduces the operational efficiency of the airport by increasing arrival delays.

Mr. Fleming similarly misunderstands the unique operation of the Selected Alternative as it functions on the ground, and therefore he erroneously concludes that there will be no difference in runway crossing procedures between it and Derivatives C-2 or C-3. The Selected Alternative designates Runway 10L/28R as a departure runway. It will be 13,000 feet in length. Because of its great length, aircraft departing from this runway will not need to use its full length, except

for certain international departures to Tokyo, Hong Kong, Rome, and similarly distant points. Instead, most aircraft will be assigned an "intersection" departure, from a point where a taxiway connects to the runway some 3,000 feet from the beginning of the runway so that 10,000 feet would still be available for takeoff. By using intersection departures, traffic landing on Runways 10C/28C and 10R/28L will be able to reach the terminal by taxiing across Runway 10L/28R, **behind** the intersection departure point. In this manner, these arrival aircraft can proceed to the terminal unimpeded by the departure activity on the departure runway. Contrary to Mr. Fleming's assertion at ¶ 32.4, the take off aircraft will not need to be held in place until the arrival aircraft crosses the departure runway, which would be the case if Runway 10C were shortened.

Those operational benefits, however, are no longer available with Derivatives C-2 and C-3. Although shortening Runway 10C/28C will not affect the intersection departures on Runway 10L/28R, the shortened runway will have its western terminus relocated by either 2,100 or 3,900 feet. In other words, the ends of these two runways will be staggered on the west. At the end of each runway, there is a Runway Protection Zone ("RPZ") in which no aircraft movement is permitted when the runway is being used by aircraft. When Runway 10C/28C is shortened, the relocated RPZ effectively closes the taxiway the arrival aircraft would use to taxi behind the departure point of Runway 10L. As a result, C-2 and C-3 would have the same type of "dependency" requiring the interruption of departures to allow arriving aircraft to cross the active departure runway. As we know from the O'Hare problems of today, such runway dependency exacts a serious toll on efficiency in order to ensure safety under those conditions. With up to 60 arrivals per hour needing to cross the active departure runway, the operational efficiency of the departure runway would be compromised in a major fashion.

Mr. Fleming is equally dismissive of the FAA's concerns with wake turbulence issues generated by Derivatives C-2 and C-3. Again, because the threshold of Runway 10C/28C is so severely staggered in its shortened condition, aircraft would land on Runway 10C parallel to the very point where aircraft are departing from Runway 10L. The Selected Alternative avoids this problem by aligning the thresholds of these two runway even with each other so that aircraft landing on Runway 10C touch down at a point well before departure aircraft on Runway 10L become airborne, thus avoiding the wake turbulence. Thus, these derivatives create another runway dependency, impacting efficiency in both arrivals and departures on these runways, and potentially derogating safety. Mr. Fleming's response to this problem is to minimize wake turbulence concerns by assigning larger aircraft with greater wake turbulence potential to other runways. Of course, this "solution" creates the same problem identified above, as approach controllers scramble to interrupt arrival streams established many miles from O'Hare to allocate runways based on aircraft size rather than point of origin. This increases complexity for both the pilot and controller, increases controller workload and reduces efficiency.

The measures the FAA would need to take in order to ensure that Derivatives C-2 and C-3 would operate safely seriously cripple the ability of these measures to provide a level of delay reduction close to that of the Selected Alternative.

¶ 34-35 Derivatives C-4 and C-5 were created by the FAA to examine O'Hare operations with Runway 10C/28C shifted to the south some 350 and 450 feet respectively in an attempt to avoid St. Johannes Cemetery.

Mr. Fleming downplays the FAA's application of its airport safety and design standards to these Derivatives. TERPS are FAA standards that govern the height of buildings and objects in relation to runways. Applying TERPS, the FAA can construct a new air traffic control tower to handle aircraft using Runway 10R/28L on a small sliver of land between the "protected surfaces" for Runway 10C/28C and Runway 10R/28L. As applied here, TERPS provides an adequate measure of safety by precluding obstructions that could compromise an aircraft conducting a missed approach to a landing runway. If Runway 10C/28C is shifted south, the relocated runway invades the space protected by TERPS for the south tower. When TERPS is violated in this manner, the FAA is required either to shorten the height of the tower to protect for such missed approaches, or must impose greater separation between the aircraft using the two southernmost runways and establish more stringent minimums for aircraft landing these two runways. If shortening the tower height causes an obstructed line of sight, then operational restrictions are the only recourse. Contrary to Mr. Fleming's assertion, there would be occasions when the FAA would operate these derivatives in a manner involving landing traffic on 10R/28L.

Shifting Runway 10C/28C also creates wake turbulence issues that are not present in the Selected Alternative. Although Mr. Fleming attempts to minimize these concerns by stating that they only occur in west flow, that 45 percent of the time the airfield is operated in this manner present significant and legitimate concerns. When Runway 10C/28C is moved south, the aircraft arriving on Runway 28C pass directly over Runway 22L at about the point where departing aircraft become airborne. The farther south the runway is relocated, the greater the possibility for wake turbulence events. Mr. Fleming's response is for pilots to use a lower power setting so that their aircraft will have a longer takeoff roll, use more runway, and achieve flight after passing below the wake turbulence of arriving aircraft. We know of no airline captain who would voluntarily adopt such a maneuver, and we know of no authority at the FAA for it to compel such a bizarre and potentially dangerous procedure. The real alternative is that traffic departing Runway 22L will be held in position on the runway until the wake turbulence event has passed. However, with some 40 arrivals per hour expected on Runway 28C, the utility of Runway 22L as one of only three departure runways would be severely compromised.

As with the other derivatives generated by FAA, we again see how each of the pieces of the airport relate to each other, and how, when one is changed, that change has impacts on other runways and the overall efficiency of the airfield. For Derivatives C-4 and C-5, these cumulative limitations on operations would be required in order to safely operate either of these derivatives. As a result, they have the real-world potential to handle considerably less traffic than the Selected Alternative.

¶¶ 36-42 Derivatives L-1 and L-2 were submitted to the FAA as potential airport runway designs that could avoid St. Johannes Cemetery.

Most of Mr. Fleming's criticism of the FAA's earlier analysis rests on a totally unfounded assumption: that the City of Chicago will only build Phase One of this project, and that such a truncated improvement project would not operate as well as either Derivative L-1 or L-2. The FAA in its EIS and in this ROD have concluded that the entire project will be completed. But, in making this assertion, Mr. Fleming also makes the point that is of principal concern to us. Mr. Fleming reports that controllers have advised him the FAA's plan to begin the Selected Alternative with the construction of the northernmost runway, Runway 9L/27R will cause gridlock at the airport. Accordingly, Mr. Fleming argues that the addition of one new runway on the far south end of the airport would operate much better.

Mr. Fleming's statement about Phase One producing gridlock is wrong, for when O'Hare is on Plan X (East Flow), and using Runways 4L, 32L and 32R, the new runway will not be in use. But, when Runways 32L and 32R are decommissioned, the newly built Runway 9L/27R will become fully operational. More importantly, however, the reason for Mr. Fleming's concern appears to be his recognition that on the north side of the airport, the addition of Runway 9L/27R adds to the existing complexity of the existing "runway triangle." These intersecting runways are all dependent upon each other, in the sense that the use of one implicates and limits the use of another. The genius of the OMP is that it breaks the runway triangle in favor of modern airport architecture. The problem with Derivatives L-1 and L-2 is that they retain the triangle.

We cannot agree with Mr. Fleming in his assertion that Derivative L-1 will perform better than Phase One of the Selected Alternative. He is incorrect in asserting L-1's capacity of a balanced airfield with 120 arrivals and 120 departures in all weather conditions. For a configuration to sustain this balance, it would require three independent arrival and three independent departure runways with no dependencies between any of the runways. Alternative L-1 does not have this capability. All departures on Runway 32L "are dependent on…"with arrivals on Runway 9L. Arrivals to Runway 9L cross runway Runway 32L approximately 5,600 feet from the departure point. Therefore, air traffic must increase the inter-arrival spacing for Runway 9L arrivals in order to meet the separation requirements for both arrivals on Runway 9L and departures on Runway 32L. In addition, Runway 4L departures become dependent upon Runway 9L arrivals. Finally, due to the runway spacing of Runways 9R and 10L, these runways must be treated as one runway and additional dependencies are created for arrival on Runway 9R and departures on Runway 10L. Ultimately, it makes little difference whether, as Mr. Fleming asserts, Derivative L-1 performs as well as, or better than Phase One of the Selected Alternative. This is because the FAA believes the full OMP will be constructed as approved here, and that the Selected Alternative has the demonstrated capacity to handle far greater volumes of traffic at lower levels of delay.

Derivatives L-1 and L-2 allow for triple streams of arrivals, unlike the Selected Alternative that allows quadruple streams in VFR weather. Moreover, these derivatives do not operate nearly as well as the Selected Alternative because of other dependencies in addition to those listed immediately above. First, in east flow, controllers would have arrivals assigned to Runways 9L, 9R, and 10. Departures would remain assigned to Runways 32L, 4L and 9L. Arrivals to Runway 9R and 10 would be independent. However, arrivals to Runway 9L would be

dependent with Runway 32L departures and also with Runway 9R arrivals. Runway 9L departures become dependent with Runway 9L arrivals and with Runway 4L departures. Finally, Runway 4L departures become dependent with Runway 9L arrivals and departures. All of this dependencies would lead to inefficiencies and increased delays. Secondly, west flow would produce similar dependencies that could only reduce the efficiency of the configuration. Arrivals would be assigned to Runways 27R, 27L and 28L. Departures would be assigned to Runways 32L, 32R and 22L. Arrivals on Runway 27R would be dependent with Runway 32L departures. The most significant dependency would be arrivals on Runway 28L and departures on Runway 22L. Runway 28L arrivals would cross Runway 22L approximately 7,000' down the runway. In light of FAA standards for separation of such traffic, the distance between arrival aircraft on Runway 28L would reduce significantly the efficiency of this operation. In summary, in both east and west flow IFR conditions, air traffic would have to take steps to operate these Derivatives in a manner that would have the immediate effect of reducing capacity and increasing delays.

Mr. Fleming is critical of the FAA's earlier analysis of the L-1 East Flow and West Flow capacity in which the agency found limited benefits to capacity or delay reduction. In response to his criticism, we suggest it is important to remember that additional runways do not necessarily mean additional capacity. The proposed layout of any new runways, including their relationship with other existing runways, is pivotal in determining the performance of the proposed airfield. After reviewing his critique, we still believe that the L-1 configuration would perform only marginally better than our existing Plan X. We understand that the FEIS considers Plan X to be part of the "No Action" Alternative, and therefore the slight improvement produced by Derivative L-1 over today's situation represents only minimal improvement, at best.

Today, Plan X has three arrival runways (Runways 4R, 9R, and 9L) and four departure runways (Runways 32L, 32R, 4L and 9L). Departures on Runway 32L are dependent with arrivals to Runway 9L. Departures on Runway 32R are dependent with departures on Runways 4L and Runway 9L. Departures on Runway 4L are dependent with arrivals on Runway 9L, and departures on Runways 32R and 9L. In contrast, Derivative L-1 East Flow has three arrival runways (Runways 9L, 9R, and 10R) and three departure runways (Runways 32L, 4L, and 10L). There are no differences between the numbers of arrival or departure runways. The north side of this proposed configuration is similar to the dependencies in existing Plan X although no departures are assigned to Runway 9L or Runway 32R. This reduction in dependency may result in marginally better performance. As with Plan X, departures on Runway 32L would be dependent with Runway 9L arrivals. Arrival spacing would be the same as today for Runway 9L arrivals. On the south side of the airfield, due to the runway spacing, arrivals on Runway 9R would have a dependency with departures on Runway 10L. Overall, this configuration would perform marginally better than existing Plan X due to the reduced coordination on the north airfield.

Similarly, Derivative L-1 in West Flow would have three arrival runways (Runways 27R, 27L, and 28L). Departures on Runway 32R would be dependent with arrivals on Runway 27R. Departures on Runway 27L would have a dependency with departures on Runway 28R.

However, this relationship is less intensive than must be conducted on the existing Plan W which causes departures on Runway 32R to be dependent with arrivals on Runway 22R and 27R, and makes departures on Runway 22L dependent with arrivals on Runway 27L. Although this configuration performs marginally better than existing Plan W, it does not accommodate the forecast level of aviation activity through the planning horizon. Perhaps, this is the reason that Mr. Fleming insists on comparing L-1 with Phase One of the OMP rather than with the Selected Alternative.

L-1 proposes a shortened Runway 10C/28C to 8,000, to avoid St. Johannes on the west end of the runway. However, the RPZ for that runway would likely preclude public attendance at the cemetery, and further shortening of this runway to alleviate this problem would render it useless.

With regard to Derivative L-2, the FAA found that it would perform worse than today's airfield in delay reduction. The north side of this proposed configuration is very similar to the dependencies in existing Plan X. However, due to the location of the runways and the geometry created by the new runways, the operation would not perform as efficiently. Departures on Runway 32L would be dependent with Runway 9L arrivals. The new Runway 9L is moved further north, causing the intersection of the extended centerline of Runway 9L to be farther from the departure point on Runway 32L. Arrival spacing would have to be increased on Runway 9L arrivals. The new Runway 9L would cross Runway 4L farther from the departure point. Therefore, Runway 4L departures would have to be held in position on the runway awaiting departure longer until the Runway 9L arrival is through the intersection of the two runways. This additional degree of dependency would result in a configuration that would perform worse than Plan X today.

Also, we disagree with the commenter's assertion that retaining Runway 14R/32L is necessary. As part of the Airport Layout Plan analysis, it was determined based on an analysis of 10-years of historical weather data that the proposed airfield (without either Runway 14L/32R or Runway 14R/32L) exceeds the requirement in FAA standards. FAA Advisory Circular 150/5300-13 – Airport Design in Appendix 1 – Wind Analysis paragraph 3. Coverage and Orientation of Runways states that "The desirable wind coverage for an airport is 95 percent, based on the total numbers of weather observations." For O'Hare, with a crosswind component of 16 knots (which is typical for large air carrier aircraft) the proposed runway layout provides 99.8% coverage. If the FAA were to retain this runway, it would rarely be placed in use because its intersections with other runways reduce its effectiveness and active use would impede traffic destined to and from the new western terminal.

In its earlier analysis, the FAA also observed that Derivatives L-1 and L-2, when combined with some or all of the components of each, would produce many of the problems associated with each while providing few benefits in terms of delay reduction for unconstrained traffic in the future. Again, comparison to Phase One of the OMP is not especially relevant when the goal of this project is to reduce delay at present and projected traffic levels. The FAA has not compared Derivatives L-1 and L-2 with Alternative B, the initial phase of O'Hare improvement. Instead, the appropriate comparison is with Alternative C, the Selected Alternative that produces only 5.9 minutes of delay at 1,194,000 operations. When measured against the Selected Alternative,

it is clear that these derivatives fall far short of achieving meaningful delay reduction during the planning horizon.

¶ 43 Derivative M was generated by the FAA in response to a newscast in which an individual asserted that a single new runway in the southernmost part of the airport could accomplish the delay reduction sought by the OMP at a fraction of the cost and without the need to take St. Johannes Cemetery. The agency's analysis of Derivative M found that it allowed quadruple approaches only during east flow in good weather, and even then, higher than normal landing minima would apply because of the converging traffic assigned to Runway 4R. FAA also found that in IFR conditions, the requirement for a 5,000 foot separation between parallel runways for triple simultaneous landings reduced this derivative to two streams of traffic. There is no improvement in capacity on the north side of the field, as the runway triangle is retained intact.

In response, Mr. Fleming asserts that the limitation on quadruple landings is of no consequence, because "discussions with local air traffic controllers at O'Hare show conclusively that triple approaches are all that are needed to handle VFR capacity at O'Hare." (¶ 43.1, p. 32). We completely disagree. One of the significant limitations to the existing airport configuration is when the weather transitions from good to poor weather, the airport loses the capability of operating triple converging approaches. The airport users schedule their activity based on the greatest capacity configurations, with the assumption that three arrival runways will be available every day. Therefore when the weather turns poor, the ability to operate triple approaches is lost, resulting in flight cancellations and increased delays. With a forecast increase in traffic of approximately 23% over the planning horizon, it is reasonable to say that delays would be significantly higher without being able to address the disparity between good weather and poor weather. The Selected Alternative provides quadruple streams of arrivals in good weather in both east and west flow, and triple streams in IFR conditions.

Mr. Fleming takes issue with the earlier FAA statement that triple approaches for IFR east or west flow would not be allowed for Derivative M or N, because a controller told him that the special equipment required for such activity could be ordered. What Mr. Fleming misses is that even if such activity were possible, triple IFR approaches in either flow would not be independent or operationally efficient. First, east flow would have arrivals assigned to Runways 9L, 9R, and 10. Departures would remain assigned to Runways 32L, 4L and 9L. Arrivals to Runway 9R and 10 would be independent. However, arrivals to Runway 9L would be a dependent and highly coordinated operation. Runway 32L departures would be dependent with Runway 9R arrivals. Runway 9L departures would be dependent with arrivals on this Runway and with Runway 4L departures. Finally, Runway 4L departures would be dependent with Runway 9L arrivals and departures. All of these dependencies lead to inefficiencies and increased delays. Virtually nothing is done to address the inherent dependencies and limitations of the existing runway triangle. Second, west flow would have similar coordination requirements reducing the efficiency of the configuration. Arrivals would be assigned to Runways 27R, 27L and 28. Departures would be assigned to Runways 32L, 32R and 22L. Arrivals on Runway 27R would be dependent with Runway 32L departures. The most significant dependency would be arrivals on Runway 28 and the necessary coordination with departures on Runway 22L. Runway 28 arrivals would cross Runway 22L approximately

7,000' down the runway. This would increase the inter-arrival separations on Runway 28 significantly reducing the efficiency of this operation. In summary, in both IFR conditions, the number of departures would be significantly lower than arrivals, especially in the east flow operation. Air traffic would have to increase the arrival separations to allow the departures to leave, in order to maintain a balanced airfield.

Although proposed Runway 10/28 in Derivative M was evaluated as a primary arrival runway, it would be used as a departure runway during certain wind and weather conditions. For this analysis the FAA assumed that the proposed runway would be 7,500'. Mr. Fleming's suggestion to shorten the runway by 1000' (7500' to 6500') to prevent the overlap of the Runway Safety Areas of Runway 28L and Runway 4R would severely limit the number of aircraft able to arrive on the runway and would eliminate a majority of the fleet mix from using this runway as departure runway. Furthermore, the suggestion of shifting the runway west to avoid shortening the runway would most likely result in the same land envelop proposed for acquisition under the Selected Alternative. Thus, the land envelop in the same southwest quadrant may have to be acquired with this derivative as the Selected Alternative with significantly fewer operational benefits.

Also, we cannot accept the assertion that under this Derivative, the railroad yard would not need to be relocated. The FAA agrees that the physical runway itself would not infringe on the railroad yard. However, the Runway Safety Area on the southwest side of the approach end of Runway 10R would encroach on the northern most portion of the railroad yard requiring at least a partial relocation. FAA Advisory Circular 150/5300-13 Airport Design states that a runway safety area shall be, "cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations." In addition, that document also provides that a runway safety shall be, "free of objects, except for objects that need to be located in the runway safety area because of their function." This is clearly not the case with the railroad yard.

There is one final comment we offer in this response to Mr. Fleming's affidavit. As described earlier, Derivative C-1 eliminates Runway 10C/28C. In designing the Selected Alternative, the planners created a runway layout design that permits quadruple streams of landing traffic in good weather. Derivative C-1 precludes that benefit, for it removes a runway intended for full-time use. In contrast, Derivatives C-2 through C-5 do not change the overall geometry of the Selected Alternative in the sense that all the runways contained in the Selected Alternative appear in C-2 through C-5, albeit in a shortened or slightly relocated format. Our comment is that at some point in the future, air traffic specialists expect technology to develop to the point where controllers at O'Hare will have the capability of conducting quadruple streams of arrivals in IFR conditions. That potential will be lost if any of these derivatives is adopted. By adopting Derivative C-1, quadruple streams are impossible in any weather. Because Derivatives C-2 and C-3 shorten a critical runway, quadruple streams are highly unlikely to receive future approval for bad weather approaches. Derivatives C-4 and C-5, because they move Runway 10C/28C closer to Runway 10R/28L, also virtually assure that quadruple streams in bad weather will never be approved, even when the technology is available because those runways will be too close to each other to authorize such procedures. .

The FAA may not wish to emphasize this point in the ROD. It does involves a degree of prediction about future air traffic techniques, rather than an assessment of how we operate O'Hare and these derivatives with the tools of today. Nevertheless, it is our judgment that this point should be recognized, insofar as adoption of any of these derivatives would deprive the FAA of a potential tool in the future that could provide significant benefits during adverse weather at O'Hare.

We trust this analysis of comments will prove helpful in the preparation of the ROD in this matter.