

The city of Crystal offers the following comments on the *Reliever Airport Economic Impact Analysis*, dated October 2005

PAGE COMMENT

- 1 The report acknowledges that it is impossible to isolate the reliever airports' economic impact to a particular community within the region.
We agree. Furthermore, this suggests that the analysis also doesn't answer the questions, "Does the region need the activity to occur at a particular airport, or can it occur elsewhere?" and "How many reliever airports does the system need?" This should be kept in mind while reading the rest of the study, which repeatedly refers to and relies on the per-airport estimated economic impacts as if the benefits occur locally, and as if the continued operation of each airport is necessary for the benefits to occur regionally.
- 2 The report mentions Crystal's proximity to downtown Minneapolis and that it has the most runways of any reliever airport in the system.
Why not mention that it is hemmed in by residential development, and that over 300 homes lie within the runway safety zones? Why not mention that its operations are declining faster than any other airport in the system?
- 3 Under "Contributions to the Local Economy," the report states, among other things, that relievers provide a base for recreational aircraft.
Only two pages after acknowledging that it is impossible to measure the local economic impacts of the airports, the study is asserting there are local economic benefits. And how, exactly, is recreational flying a benefit to the communities in which an airport is located?
- 4 The report acknowledges that estimating local impacts is meaningless, and that impact of Crystal is interpreted as being regional in nature and concentrated in the northwest quadrant.
Once again, we agree that these facilities provide regional, not local, benefits; although the question remains unanswered whether regional benefits will only continue if each airport continues to operate.
- 5 "All of the operating expenses incurred as a result of running an airport represent injections into the local economy."
(1) The study just said it is impossible to measure the effects locally; and (2) regionally speaking, net expenditures by MAC at its reliever airports are being paid for by other people and businesses in the region. That's just moving the money around within the region.
- 7 "Businesses were asked for information on sales and on-airport employment."
What steps were taken to ensure that the businesses' self-reported data are accurate? Were these randomly spot checked against objective data to see if the self-reported figures are realistic?

PAGE COMMENT

- 7 The study assumed the range of true visiting flights at the six reliever airports was 40% - 65% depending on the airport.
We question the basis for these assumptions and would like to see the notes and raw data on which they are based.
- 8 The study assumed visitor spending at the three minor airports to be \$90 per person per day.
Again, we question the basis for these assumptions and would like to see the notes and raw data on which they are based.
- 9 The study uses "Impact multipliers."
Because the direct economic benefit calculations are questionable, any application of impact multipliers is also questionable. Furthermore, when applied to recreational flight activities carried out by residents of the Twin Cities, we question the use of economic impact multipliers because such impacts only occur if they airport's activities actually bring outside money into the region. It is instructive to note that the subsequent "Economic Impact Analysis of the Reliever Airport System - December 2005" states on page 6 that the FAA specifically excludes multipliers from its benefit cost analyses – for good reason.
- 20 The study counts \$476,000 of MAC spending at the Crystal Airport as "direct economic activity".
It may be activity, but it is not outside money coming into the region; it is MAC paying out money it has collected as fees from airport users or transfers from operations at MSP.
- 22 The study estimates 65% of 38,700 itinerant operations at Crystal are "true visiting flights".
We question the basis for this assumption and would like to see the notes and raw data on which it is based. Anecdotal evidence suggests that few if any outside visitors from the Twin Cities fly into Crystal for business or pleasure. If the 65% figure is correct, that would mean 69 true visiting flights per day with 172 visiting people per day.
- 22 The study estimates each visiting person is here for 1.4 days and spends an average of \$90 per day, yielding \$3,948,000 true visitor spending per year or \$10,800 per day.
We question the assumed \$90 spending per visitor per day. Again, anecdotal evidence suggests otherwise. If 172 visitors from outside the Twin Cities region are really arriving at Crystal each day, and not other airports, and if they spend a total of \$10,800 each day, why did the Embers restaurant located at Airport Road and CSAH 81 close several years ago? Why is the local market for hotels not booming?
- 22 To the airport operations and on-airport businesses figures, the study uses the final demand output multiplier for the air transportation industry of 2.15.
We question the application of a multiplier for air transportation in general at a primarily recreational airport.

PAGE COMMENT

- 22 To the visitor spending figures, the study uses the final demand output multiplier for the tourism industry of 1.98.
We question the application of a multiplier for tourism in general at a primarily recreational airport.
- 23 The study then estimates employment of 200 based on the product of the direct figures and the multipliers.
Because these figures are based on a chain of assumptions that are potentially erroneous when applied to a primarily recreational airport, the employment figure is questionable as well. The employment estimate based on airport operating expenses is derived from money spent by MAC – but this is money which has been taken from other sources such as locally-charged fees or transfers from operations at MSP. The employment estimate based on visitor spending is derived from a chain of questionable assumptions not supported by observable activity in the community. We believe that the true figure may roughly correspond with the estimated employment at the on-airport businesses, and we question why the actual employment figure for those businesses is not used instead of multiplier-based estimates. Furthermore, what share of on-airport business consists of serving recreational pilots from within the region, and therefore does not reflect economic benefit being brought into the region from outside?
- 36 The study's estimated overall impact from the Crystal Airport is \$19,273,000, or 7.6% of the estimated \$254,663,000 impact of the reliever system as a whole. Its estimate of 200 jobs generated by Crystal Airport is 8.9% of the estimated 2,258 jobs generated by the reliever system as a whole.
In addition to questioning the assumptions leading to the \$19,273,000 and 200 jobs estimates for Crystal Airport, we thought it prudent to examine fuel sales, a rough approximation of actual flight activity encompassing not only the number of operations but also the type of aircraft and typical distances flown. This is a sort of "check" on the assumptions the study uses to estimate economic and employment impacts. Based on figures in the study, the value of fuel sold at Crystal Airport is \$774,000, or 3.1% of the \$25,014,000 in fuel sales for the reliever system as a whole. The study estimates that Crystal Airport's share of the reliever system's economic impact is 250% higher than its actual share of fuel sold. Similarly, the study estimates that Crystal Airport's share of the reliever system's employment impact is 290% higher than its actual share of fuel sold. This raises the question, "What are the qualitative characteristics of aviation activities at Crystal Airport, as compared to the reliever system as a whole?", and suggests that the study's economic impact assumptions are flawed in some way.

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PAGE COMMENT

- 1 The first set of figures shows Crystal's estimated net present value to be in \$6.2 million with partial (85%) rebasing within the MAC system and \$8.7 million with full (100%) rebasing within the MAC system.
These figures are derived from the benefit-cost ("B-C") analysis not the financial analysis which focuses on actual MAC costs and benefits. While the B-C analysis may be consistent with FAA criteria typically applied to federal funding requests for airport expansion projects, it is seriously flawed as a basis for regional decision-making regarding how many reliever airports MAC must operate to meet regional aviation needs. See also our comments regarding pages 6, 26, 27 and 29-30.
- 1 The second set of figures shows Crystal's estimated net present value to be \$2.3 million with full (100%) rebasing within the MAC system.
These figures are from financial analysis focusing on the costs and benefits for MAC. We believe it rests on a clearly faulty assumption: That after closing the airport and spending the money necessary to add landside capacity at other airports in its system, MAC would just let the 430 acre Crystal site sit there, vacant and unused, instead of selling it for development. See also our comments regarding pages 21-22.
- 1 The second set of figures shows Crystal's estimated net present value to be \$240,000 with partial (85%) rebasing within the MAC system.
These figures are also from the financial analysis focusing on the costs and benefits for MAC. In addition to the clearly faulty assumption described above (that MAC would just let the site sit there), there is another problem with this: Why not use a 75% rebasing scenario? 60%? What about 50%? In fact, the \$240,000 net present value figure is so minimal that a slight change in the rebasing scenario (say, 80% instead of 85%) would almost certainly show a negative net present value for Crystal. One has to wonder why the consultant picked 85% as the 'magic number'. See also our comments regarding pages 21-22.
- 2 The closure of any one reliever airport... would significantly limit the system's ability to accommodate any future growth that might occur in general aviation. In particular, any closure would put the system quite near its capacity for storage of aircraft.
But (1) what segments of general aviation are growing - business aviation or recreational flying; (2) what is MAC's role and responsibility for providing storage space for recreational aircraft; and (3) what is the regional value and justification for MAC to continue to subsidize recreational aircraft storage indefinitely and without limitation?
- 2 The benefit-cost calculations and financial analyses presented here do not include the shutdown costs involved in actually closing airports and buying out existing leases, nor do they include the proceeds from the possible sale of vacated land.
This makes it clear that this study did not seriously examine the possibility of closing one or more of the minor relievers.

PAGE COMMENT

- 6 Benefit-cost ("B-C") analysis evaluates all of the benefits and costs affecting the aviation public.
But what about the other 2.7 million people who live in the seven-county metro? The FAA's B-C methodology is designed to evaluate applications for federal funding to expand aviation facilities, and does no, and was never intended to, answer broader question of regional public policy, i.e. what would the benefits and costs be of closing one or more of the minor reliever airports? For example, in a closure scenario, the FAA method counts additional travel time of a few hundred pilots having to travel farther to get to their planes, but ignores the travel time savings for potentially thousands of daily commuters who could live on a redeveloped airport infill site instead of the fringe of the metro.
- 6 Benefit-cost ("B-C") analysis is the appropriate method for evaluating the operation of the reliever airports.
True, but not the B-C method used by the FAA to review requests for federal funding for airport expansion projects. To be objective, the B-C analysis for a closure scenario would, at a minimum, have to account for the following things missing from an FAA-type B-C analysis:
- *Net proceeds to MAC for the sale of the airport site (after deducting any FAA paybacks, diversion of proceeds to other MAC reliever system improvement projects, tenant lease buyouts, etc.)*
 - *Travel time savings resulting from new infill development on the airport site vs. new development on the edge of the metro*
 - *Infrastructure cost savings resulting from new infill development on the airport site vs. new development on the edge of the metro*
 - *Effect of airport closure on property values in surrounding communities*
 - *Eliminating the existing safety hazard of having over 300 homes in the safety zones*
- 12 Study says that it assumes operation to be flat, in the case of Crystal at 80,000 per year.
But the 2004 actual figure was 74,879 and the 2005 figure is projected to be 72,000.
- 15 For the full (100%) rebasing scenario, the study allocates 170 Crystal aircraft to Flying Cloud and 90 to Anoka County-Blaine.
Even if we are to assume that the only MAC airports they would go to are Flying Cloud and Anoka County-Blaine, the 'center of gravity' for Crystal owners is roughly midway between Flying Cloud and Anoka County-Blaine. A 50/50 split assumption is better supported by the facts.
- 16 For the partial (85%) rebasing scenario, the study allocates 130 Crystal aircraft to Flying Cloud, 90 to Anoka County-Blaine, and 40 outside the MAC system to Buffalo.
What about the many other public use airports with hard surfaced runways located just outside the MAC system, within an hour's drive of Crystal? Among these are Rush City, Cambridge, Princeton, Clear Lake, Maple Lake and Glencoe. Again, what was the basis for choosing 85% rebasing within MAC vs. 80%, 75%, or some other figure?

PAGE COMMENT

- 17 Regarding itinerant operations, "...it does not appear that the reallocations we assumed (due to closure) were unreasonable or would cause any pressure on the airside capacity of the airports receiving additional flights."
This confirms that the value of the minor relievers is found primarily in the storage of aircraft.
- 21-22 The financial analysis of MAC's benefits and costs estimates the net present value to be \$2.3 million with full (100%) rebasing within the MAC system and \$239,000 with partial (85%) rebasing within the MAC system.
We question the assumption that, after closing Crystal and spending the money necessary to add landside capacity at other airports in its system, MAC would just let the 430 acre Crystal site sit there, vacant and unused, instead of selling it for development. We also wonder why the partial rebasing scenario uses an 85% figure, which assumes just 15% of the 260 planes at Crystal would be based outside the MAC system. But this 15% change drops the net present value of MIC from \$2.3 million to \$240,000. It wouldn't take much more of a shift to non-MAC airports for the net present value of Crystal to be negative for MAC under the partial rebasing scenario. One has to wonder why the consultant picked 85% as the 'magic number'.
- 26-29 In the benefit-cost analysis, under benefits to operators of based aircraft, the study charges the closure scenarios 48.5¢ per mile and \$34.80 per hour for the additional distance and travel time they would spend getting to alternate airports, yielding a \$1,287,000 net present value benefit of continued operation.
Again, this may make sense for FAA to consider when deciding whether to federally fund an airport expansion project, but it doesn't make sense as a basis for regional policy decisions about how many airports are really needed. Also, the analysis fails to include the travel distance and time that would be saved if the airport site were redeveloped, and hundreds of jobs and thousands of residents could be located closer in rather than at the edge of the metro. If the latter is not going to be counted, then neither should the former.
- 26-29 In the benefit-cost analysis, under benefits to general aviation visitors, the study similarly charges the closure scenarios for the additional distance and travel time of visitors on itinerant flights, yielding a \$5,077,000 net present value benefit to continued operation of the present facilities.
Because there are few, if any, regional destinations in the northwest quadrant of the metro area, this assumption is highly questionable. The study does not indicate what percentage of itinerant flights are assumed to be "true visiting flights", and it does not indicate where visitors flying into Crystal might actually be going. We therefore have no way of knowing the statistical basis for this very large assumed benefit of continuing operation. Anecdotal evidence, such as a decline in the few tourism-related businesses that had ever existed near the airport (i.e. the closure of the restaurant at Airport Road and CSAH 81), suggests that the \$5,077,000 figure is wildly overstated.

PAGE COMMENT

- 29 *It is instructive to note that the differences in net present value between the MAC financial analysis and the benefit-cost analysis only consider two factors: Travel distance and time saved by pilots; and travel distance and time saved by visitors. At a minimum, a conclusive benefit-cost analysis would have to include the following additional factors missing from this study:*
- *Net proceeds to MAC for the sale of the airport site (after deducting any FAA paybacks, diversion of proceeds to other reliever system improvement projects, tenant lease buyouts, etc.)*
 - *Travel time savings resulting from new infill development on the airport site vs. new development on the edge of the metro*
 - *Infrastructure cost savings resulting from new infill development on the airport site vs. new development on the edge of the metro*
 - *Effect of airport closure on property values in surrounding communities*
 - *Eliminating the existing safety hazard of having over 300 homes in the safety zones*

The city of Crystal offers the following comments on the Reliever Airports Task Force report entitled, *Recommendations Regarding the Future Operation and Development of the Reliever Airport System*, dated January 10, 2006

PAGE COMMENT

- 3 The Task Force "focused its efforts on five areas:
- What role do the reliever airports serve?
 - What is the proper number, size and location of the airports?
 - What capital improvements are necessary?
 - What are the realistic capital funding sources?
 - What is the correct management arrangement?"
- The last three areas logically follow from the first two, and they cannot be answered without resolution of the first two questions. Unfortunately, the first two questions were papered over, which led to the unfounded premise that continued operation of all six relievers is justified. Since the basic policy questions posed by the first two questions were not addressed, the task force focused instead on operational fixes.*
- 3 Acknowledges the minor airports provide limited relief to MSP but offer options for aviation activity incompatible with goals elsewhere.
What are the "goals elsewhere"? And why not consider the options outside the MAC system?
- 3 "Safety is paramount."
Then why no discussion of the roadways, houses and apartments in Safety Zones A and B at Crystal?
- 3 "The Task Force conducted numerous public meetings...to seek input from stakeholders, including airport tenants, Reliever Airport Advisory Council, Northwest Airlines, Aircraft Owners and Pilots Association, Minnesota Business Aircraft Association, International Air Transport Association, state legislators, city leaders, Bottineau Boulevard Partnership, airport managers, private airport operators, developers, and a number of commercial operators."
Neither elected officials nor staff from the city of Crystal were invited to present the city's ideas directly to task force for consideration. At the city's request, the City Manager met on November 29, 2005, with members of the task force and received an overview of the goals and timeline for the process. The city questions the objectivity of process, because it did not include a thorough examination of the overarching policy issue; i.e., the continued role of a public body in maintaining three recreational airports within the metro.
- 4 MAC's GA responsibility is to serve current needs and prepare for future growth.
Where is the analysis of the type of aviation that occurs at Crystal as distinct from GA in general, which includes business travel?

PAGE COMMENT

- 5 FAA Aerospace Forecasts concluded that 2001-2003 proved to be difficult years for GA but projects increased GA growth in beginning in 2005.
Why use 2-year-old FAA forecasts instead of actual numbers that are available through most of 2005? What's been the reality for GA nationally, and in the MAC system and minor, recreational airports like Crystal specifically? What are the trends for recreational flying versus those for other GA such as business aviation?
- 6 There appear to be two separate GA economies, (1) turbojets and (2) everything else.
The report speaks to the turbojet economy and the projected growth in business jets, business aviation, etc. What about the piston aircraft economy such as the recreational flying that occurs at the minor airports like Crystal?
- 6 Task force recommends that the Crystal Airport should (1) continue to serve as recreational use airport, and 2) with consideration given to alternative development opportunities that meet goals of MAC, tenants and surrounding community.
But (1) Why?; and (2) Such as?
- 8 Tenants argue their personal property taxes should be redirected to MAC not local governments because they derive little benefit.
Airport tenants and users receive police & fire protection, a maintained roadway system and public utilities. The land is tax-exempt; only personal property taxes are assessed.
- 8 MAC should seek a significant share of MnDOT aviation funds, most of which currently goes to outstate airports.
This would benefit the primary relievers, but why propose to take money that might otherwise be available to Greater Minnesota airports, including 13 public use airports with hard-surfaced runways located within 60 miles of Crystal? Greater Minnesota airports are a likely option for tenants who choose to leave the MAC system in response to increasing fees and hangar requirements; they may also be a more appropriate venue for recreational flying than an airport embedded in a residential area within the metropolitan area.
- 9 A growing number of aircraft owners want to construct hangars at relievers.
Which types of aircraft, and at which airports? The actual numbers from Crystal, and the trend for the past ten years, suggest otherwise.
- 12 If growth is not accommodated at reliever airports, the alternative will cause congestion at MSP.
But this is based on business jets crowding out commercial jets at MSP and has little to do with the typically recreational flying occurring at Crystal. Again, the report does not address the basic question of what is the regional value of having a recreational airport embedded in an urban area?
- 13 MAC has held operating expenses flat over the past 5 years.
Operations at Crystal have decreased dramatically during that time.

PAGE COMMENT

- 14 MAC should amortize its portion of capital costs by on and off airport development.
In the case of Crystal, what sort of development? Where?
- 14 The report recommends several additional fee-based revenue sources.
Shouldn't the study take into account the likely effect of the additional fees on the number of recreational aircraft based at Crystal? Wouldn't that be good to know in order to have a meaningful evaluation of the long-term need for the facility?
- 16 The report says that the task force has identified property available for non-aviation development at each airport, such as gas stations, industrial/office/condo, hotels, restaurants, strip malls, mini-storage, new car lots, nursery plots; and recommends aggressive pursuit of development opportunities on land w/o immediate aeronautical need.
The task force has yet to share with the city what they are contemplating for Crystal.
- 18 The report recommends stronger MAC control over maintenance, structural integrity and aesthetics of hangars to keep them "like new".
This should have been required years ago. How will tenants react to the new requirements, given their price sensitivity? This might accelerate the decline in use of and demand for the Crystal Airport. As with the fee increases, shouldn't the study take into account the likely effect of the additional fees on the number of recreational aircraft based at Crystal? Again, wouldn't that be good to know in order to have a meaningful evaluation of the long-term need for the facility? What about the non-aviation uses that have been observed at Crystal, such as car, boat and RV storage? The Task force recommendations don't address this problem, and current MAC interior inspection process allows tenants to evade the requirement that their use be aviation-related.

**CRYSTAL AIRPORT POSITION PAPER
- AN OVERVIEW -**

The information below offers an overview of key points from the *Crystal Airport Position Paper* prepared by Crystal city staff in December 2005 to inform the broader community about the need to examine the public policy questions posed by the Metropolitan Airport Commission's continued operation of the Crystal Airport (MIC) as a facility for recreational fliers and to raise issues that need to be at the heart of that examination.

MIC Operations & Economics (Sources: MAC, FAA, MnDOT)

- 56.3% decline in annual flight operations, 1995-2004 (from 171,478 to 74,879).
- Operation totals through 11/30/05 suggest a 4% decrease in operations in 2005 (from 74,879 to an estimated 72,000).
- 2004 operations are 40% less than total operations in 1964 (124,064).
- Based aircraft decreased 23% between 1995 and 2004 (327 to 253).
- 900% increase in the number of non-use aircraft, 2000-2005 (from 4 to 36).
- Avg. annual revenue, 1995-2004: \$157,000
- Avg. annual operating expenses, before depreciation, 1995-2004: \$597,238
- Avg. annual net operating deficit, 1995-2004: (\$290,542)
- Avg. annual deficit, with depreciation, 1995-2004: (\$496,658)

Facility Overview

- MIC occupies over 430 acres in Crystal, Brooklyn Park, and Brooklyn Center.
- MIC is characterized by MAC as *...primarily a facility for propeller aircraft, designed to meet the needs of private and recreational pilots.*
- Sufficient perimeter land was never acquired to provide adequate safety zones. MIC is surrounded by single-family neighborhoods. Safety zones contain over 300 single-family homes and seven 4-plexes.
- Runway expansion is financially impractical and unlikely due to existing roadways, local land use constraints and the high cost of acquisition and clearance of properties within the safety zones.

The Alternatives

- Sufficient airside capacity exists within the system to support relocation of airside capacity from Crystal.
- Reasonable options exist for recreational aircraft storage both within and outside of the MAC system. (There are 18 public airports with hard-surfaced runways within 60 miles of MIC, with over 700 acres of land available for hangar construction.)

Rational Public Policy Discussion Leads to Rational Operational Decisions

- The policy discussion must include a review of whether promoting recreational aviation remains a public responsibility, and whether that responsibility is necessarily synonymous with an obligation to operate and maintain recreational airports within fully developed portions of the metropolitan area. This discussion is not complete without thorough consideration of whether the need exists to provide public facilities for recreational pursuits.
- If there is confirmation that continuing operation of all three recreational airports no longer serves the best interests of the region, perennially runs deficits, and serves a limited number of recreational fliers, the MAC has an obligation to either a) justify its role in continuing to operate public facilities to accommodate recreational fliers; or b) acknowledge that closure better serves the greater public good and protects the safety and welfare of the general public.
- The policy discussion must include consideration of the benefits to the region presented by the replacement of recreational aviation facilities with uses that offer broader public benefits.
- The policy discussion ultimately must conclude in a decision that will reflect sound public policy and an understanding of MAC's responsibility to its nearly 3 million customers. Consideration of the broader interests of the entire region should resonate in that decision.