# Review of Proposed General Aviation Airport for Shelby County

## Presentation to the Airport Advisory Committee of the Shelby County Fiscal Court

July 20, 2005

Richard Golaszewski GRA, Incorporated



#### Summary Findings

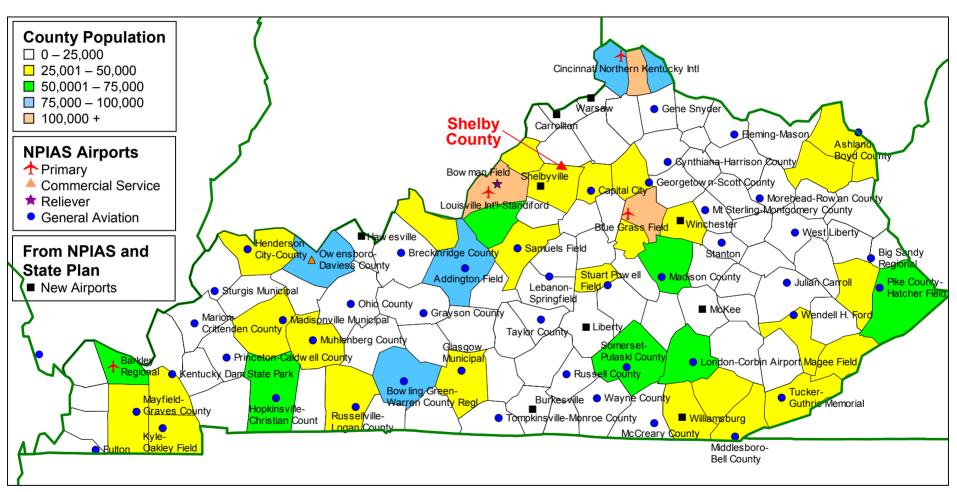
- Proposed airport not eligible for Federal funds
- → Even if the capital costs of the proposed airport were largely funded by FAA grants, there still would be substantial costs each year that would fall on Shelby County, and therefore on its taxpayers
- Existing airports in Louisville and Frankfort meet Shelby County's business community air transportation needs
- → Businesses are locating in Shelby County to be along or located near the I-64 and I-71 corridors and have located there in absence of a public use airport in the county
- → Federal and state funding make new airports look attractive to communities, but there are continued costs to the citizens once the airport is built—this is validated by the experience of similar airports in Kentucky
- A new airport would remove a substantial parcel from the county's tax rolls

### GRA Assignment

- Review 1998 feasibility study for proposed airport
- Assess proposal in light of Federal Aviation Administration (FAA) requirements for funding new general aviation airports
- Examine the market that would be served by the proposed airport
- → Visit a range of general aviation airports in Kentucky to assess the existing market for airport services and airport financial performance
- Review financial records of selected airports
- Determine whether proposed airport meets requirements for entry into National Plan of Integrated Airport Systems (NPIAS)
- Determine whether proposed airport would impose continuing costs on county and its residents



### NPIAS Airports in Kentucky – County Map



NPIAS airports are located either in the most densely populated counties or those that are remote from other airports.



### Shelby County Airport Feasibility Study

- → Feasibility Study completed in 1998
- Feasibility study cannot be used to support NPIAS entry or federal funding
  - → Fails to acknowledge benefit-cost analysis (BCA) is key decision variable
  - Does not consider alternatives to meet community's need for air transportation
  - → Fails to show proposed airport is best alternative
  - Forecasts not approved by FAA

## Forecasts of Based Aircraft Extremely Optimistic and Not Likely To Be Achieved

- → Feasibility Study projects proposed airport as third busiest GA airport in state after Bowman Field (LOU) and Blue Grass Airport (LEX)—highly unlikely
- → Given the low overall growth in projected KY based aircraft count per State Plan, most of the business base for the proposed airport will come from existing based aircraft and flights diverted from LOU and Capital City (FFT)
- → Because airport will only shift activity from other Kentucky airports, it will not contribute much to economy and will harm viability of remaining system
- → FAA's 30 minute drive time criteria was established so new airports do not cannibalize the business of existing airports

## GA Based Aircraft and Operations at Kentucky Airports

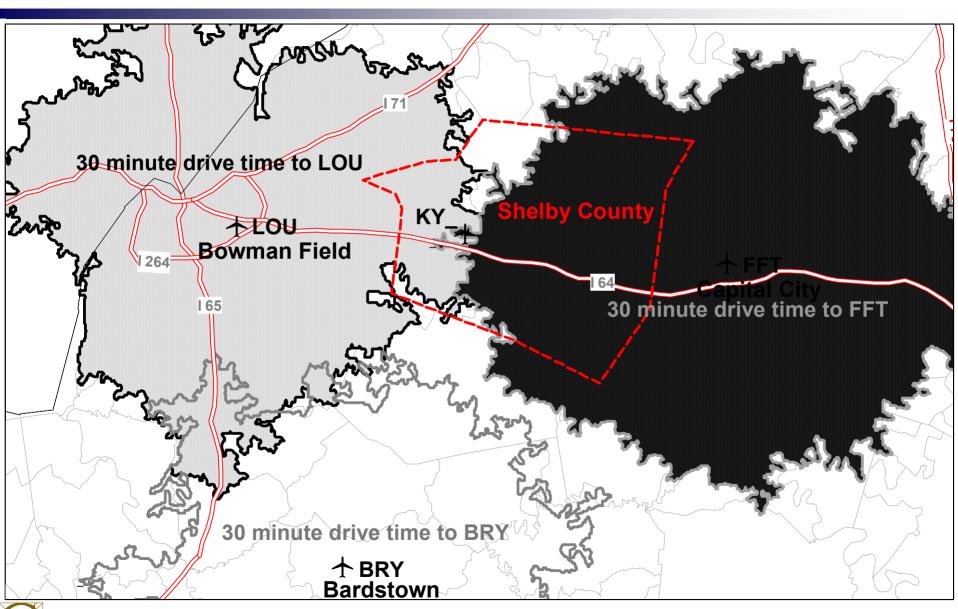
### Feasibility Study Estimate of 100+ Based Aircraft and 40,000 Annual Operations is Extremely Optimistic

#### Number of NPIAS/TAF Airports in Kentucky

| Operations      | Based Aircraft |       |       |        |      |       |  |  |  |
|-----------------|----------------|-------|-------|--------|------|-------|--|--|--|
| Operations      | 0-25           | 26-50 | 51-75 | 76-100 | 100+ | Total |  |  |  |
| 0 - 15,000      | 27             | 6     | 1     | 0      | 0    | 34    |  |  |  |
| 15,001 - 30,000 | 0              | 8     | 1     | 1      | 0    | 10    |  |  |  |
| 30,001 - 45,000 | 0              | 0     | 1     | 0      | 0    | 1     |  |  |  |
| 45,001 - 60,000 | 0              | 0     | 0     | 1      | 0    | 1     |  |  |  |
| 60,001 - 75,000 | 0              | 0     | 0     | 2      | 0    | 2     |  |  |  |
| 75,001 - 90,000 | 0              | 0     | 0     | 0      | 0    | 0     |  |  |  |
| 90,000+         | 1              | 0     | 1     | 0      | 2    | 4     |  |  |  |
| Total           | 28             | 14    | 4     | 4      | 2    | 52    |  |  |  |

Source: FAA FY2005 to FY2009 National Plan of Integrated Airport Systems and FAA FY2004 Terminal Area Forecast.

### 30 Minute Airport Drive Times



## NPIAS Airports Within Half-Hour Driving Time of Another NPIAS Airport

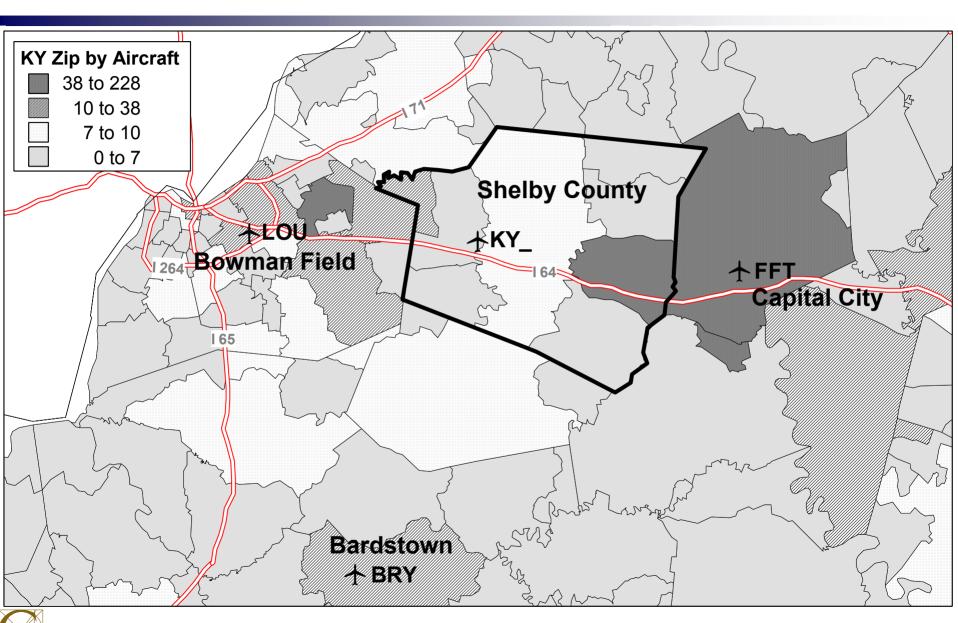
#### Nearly All of Kentucky's NPIAS Airports Meet 30 Minute Criteria



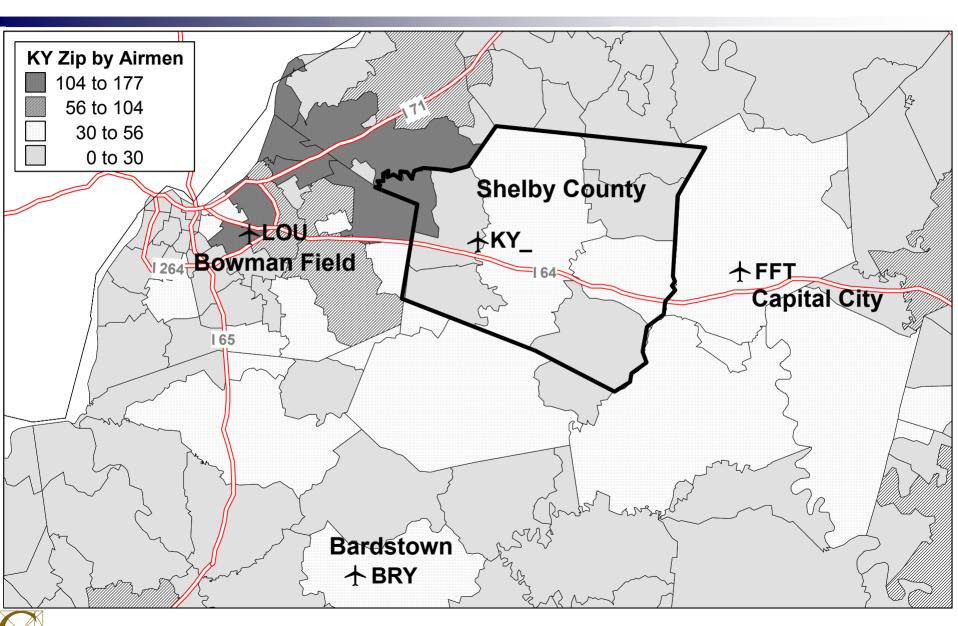
## FAA Benefit-Cost Analysis (BCA) Requirements for New Airports

- → Require FAA approval of forecasts or forecasts that are consistent with FAA Terminal Area Forecast (TAF); no forecasts for the proposed airport have been reviewed by FAA or are in TAF
- Select the alternative that meets need based on BCA results—e.g., alternate sites must be considered
- Must consider all costs and benefits
- Only benefits are reduced drive time for pilots who might base aircraft at proposed airport (benefits likely to be small)
  - Most pilots and registered owners of aircraft are located closer to LOU or FFT
  - → There are no other national benefits of proposed airport, which is FAA criteria—FAA will not support a proposal that is simply a transfer of activity or benefits from one airport to another
- → No national benefit; could divert revenue away from existing NPIAS airports; FAA is aware of this kind of problem and will not pay for development that does this

### Based Aircraft in Region by Zip Code



### Based Pilots in Region by Zip Code



### Is a New Airport Justified?

- → Requires identification of need for proposed project—there has to be a compelling aviation system need
  - Cannot be just: "want to have"
  - → A need as defined by FAA considers capacity available at airports within a 30 minute drive
  - → Industrial development alone is not an accepted need to FAA
  - → FAA generally does not fund new GA airports to add capacity
- Requires analysis of alternative ways of meeting need
  - → There are two NPIAS airports within a 30 minute drive of Shelbyville and almost all of Shelby County
  - → No consideration of alternate sites
- > There is no "need" to expand airport capacity for this community

July 20, 2005

#### A Primer on Airport Finance

- → Small airports, even those with some commercial flights, do not pay their own way
  - → Capital investment paid from local, state and federal grants
  - → Operating costs defrayed by local subsidies
- → FAA provides grants for capital investment, but recognizes that airports compete for based aircraft and traffic—entry criteria for NPIAS is meant to limit excess capacity
  - Cannibalization of markets (new airport creates three airports all more financially burdensome to their communities than the existing two)
  - → 30 Minute Rule
- → A community might choose to subsidize an airport to access the air transportation system
  - > Should be tangible benefits to community
  - Not fiscally responsible if nearby airports can meet community need
  - → Money can be put to better use or returned to taxpayers



### Financial Assessment of Local Airports

| Location ID | County     | City           | Facility Name                               | Total<br>Based<br>Aircraft | Total<br>Operations | Commercial<br>Service<br>Operations | Visit        | Financial<br>Data |
|-------------|------------|----------------|---|----------------------------|---------------------|-------------------------------------|--------------|-------------------|
| DWU         | Greenup    | Ashland        | Ashland-Boyd County                         | 45                         | 10,100              |                                     |              | ✓                 |
| BRY         | Nelson     | Bardstown      | Samuels Field                               | 35                         | 10,650              |                                     | ✓            | ✓                 |
| BWG         | Warren     | Bowling Green  | Bowling Green-Warren County Regional        | 72                         | 62,640              | 118                                 |              | ✓                 |
| DVK         | Boyle      | Danville       | Stuart Powell Field                         | 41                         | 18,000              |                                     | ✓            | ✓                 |
| EKX         | Hardin     | Elizabethtown  | Addington Field                             | 56                         | 12,400              |                                     | ✓            | ✓                 |
| FFT         | Franklin   | Frankfort      | Capital City                                | 87                         | 49,200              |                                     | $\checkmark$ | ✓                 |
| 27K         | Scott      | Georgetown     | Georgetown Scott County - Marshall Field    | 61                         | 23,150              |                                     | ✓            | ✓                 |
| HVC         | Christian  | Hopkinsville   | Hopkinsville - Christian County             | 45                         | 20,440              |                                     |              | ✓                 |
| LOZ         | Laurel     | London         | London-Corbin Airport - Magee Field         | 77                         | 15,800              |                                     |              | ✓                 |
| LOU         | Jefferson  | Louisville     | Bowman Field                                | 328                        | 118,290             |                                     | ✓            | ✓                 |
| IOB         | Montgomery | Mount Sterling | Mount Sterling - Montgomery County          | 67                         | 32,155              |                                     | ✓            | ✓                 |
| 139         | Madison    | Richmond       | Madison                                     | 42                         | 15,300              |                                     | ✓            | ✓                 |
| SME         | Pulaski    | Somerset       | Somerset-Pulaski County - J.T. Wilson Field | 50                         | 29,305              |                                     |              | ✓                 |
| 612         | Washington | Springfield    | Lebanon-Springfield                         | 20                         | 5,260               |                                     | $\checkmark$ | ✓                 |
| LUK*        | Hamilton   | Cincinnati     | Lunken Field                                | 273                        | 108,904             | 96                                  | ✓            | ✓                 |

<sup>\*</sup> In Ohio

Sources: FAA Landing Facility File and GRA, Incorporated

#### **Observations from Airport Visits**

- → Feasibility study estimates of based aircraft and operations are extremely optimistic, given experience of similar airports
  - → In shadow of two larger, better equipped and financed airports
  - Most activity at proposed new airport would be diverted from LOU and FFT
- → No other similar airport has the level of activity (based aircraft and operations) projected for the new airport
- Proposed airport will have to open with full capabilities to attract any turbine business aircraft—operators select airports based on infrastructure for all weather operations.
- → Without business aircraft, the airport will serve only personal flying and flight training which do not produce much airport revenue; the subsidy from the county taxpayers will benefit only a few individual owners and operators of light aircraft
- → All the airports visited received some subsidy for operating and capital costs
  - → Subsidy from local government—Similar general aviation airports are not self-financing and rely heavily on local taxpayers to cover operating costs
  - → In kind services from local government
  - Matching funds for state and federal grants

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### Financial Support of Local Airports Annual Average Revenues by Source

\$804,217

| Annual Average      | Marion-<br>Washington | Georgetown | Elizabethtown | Madison   | Capital City | Somerset-<br>Pulaski | Danville<br>Boyle County |  |
|---------------------|-----------------------|------------|---------------|-----------|--------------|----------------------|--------------------------|--|
| Revenue             | Years                 | Years      | Years         | Years     | Year         | Years                | Years                    |  |
|                     | 2001-2004             | 2001-2004  | 2001-2004     | 2001-2004 | 2005         | 2001-2004            | 2002-2005                |  |
| Local Government    | \$123,631             | \$227,250  | \$32,221      | \$27,300  | \$0          | \$33,451             | \$30,700                 |  |
| State Government    | \$107,626             | \$4,187    | \$0           | \$101,059 | \$250,000    | \$1,820,928          | \$29,631                 |  |
| Federal Government  | \$0                   | \$127,505  | \$85,352      | \$255,728 | \$81,400     | φ1,020,920           | Ψ29,031                  |  |
| Other Grants        | \$0                   | \$0        | \$145,169     | \$4,375   | \$39,700     | \$0                  | \$0                      |  |
| <b>Total Grants</b> | \$231,257             | \$358,941  | \$262,742     | \$388,461 | \$371,100    | \$1,854,379          | \$165,839                |  |
| Interest Income     | \$4,632               | \$5,318    | \$2,092       | \$1,151   | \$0          | \$1,065              | \$1,784                  |  |
| Operating Revenue   | \$25,246              | \$343,366  | \$46,814      | \$22,149  | \$302,324    | \$166,443            | \$56,362                 |  |
| Total Revenue       | \$261,135             | \$707,625  | \$311,648     | \$411,761 | \$673,424    | \$2,021,887          | \$223,985                |  |

| Total Revenue       | \$261,13  | <b>35</b> \$707,625  | \$311,648      | <b>3 \$411,761</b>       | <b>\$673,424 \$2,021</b> | ,887 \$223,985      |
|---------------------|-----------|----------------------|----------------|--------------------------|--------------------------|---------------------|
|                     | ·         |                      |                |                          |                          |                     |
|                     | Bardstown | Bowling Green-       | Ashland-Boyd   | Mt. Sterling -           | Hopkinsville             | Louisville Regional |
| Annual Average      | Nelson    | <b>Warren County</b> | Asilialiu-boyu | <b>Montgomery County</b> | <b>Christian County</b>  | Bowman Field        |
| Revenue             | Years     | Years                | Years          | Years                    | Years                    | Years               |
|                     | 2001-2004 | 2001-2004            | 2001-2004      | 2001-2004                | 2001-2004                | 2001-2004           |
| Local Government    | \$14,506  | \$200,769            | \$8,875        | \$20,000                 | \$57,802                 | \$0                 |
| State Government    | \$48,574  | \$2,828              | \$12,571       | \$209,881                | \$29,629                 | \$0                 |
| Federal Government  | \$22,500  | \$42,976             | \$0            | \$75,000                 | \$323,251                | φυ                  |
| Other Grants        | \$0       | \$44,544             | \$41,045       | \$0                      | \$0                      | \$932,994           |
| <b>Total Grants</b> | \$85,581  | \$291,117            | \$62,491       | \$304,881                | \$410,682                | \$932,994           |
| Interest Income     | \$607     | \$3,334              | \$266          | \$1,105                  | \$28                     | \$0                 |
| Operating Revenue   | \$39,816  | \$509,766            | \$171,592      | \$13,096                 | \$8,819                  | \$1,339,167         |
|                     |           |                      |                |                          |                          |                     |

\$234,348

\$319,082

\$126,004

**Total Revenue** 

\$419,529

\$2,272,160

## Financial Support of Local Airports Annual Average Percent of Revenue by Source

| Percentage of       | Marion-<br>Washington | Georgetown | Elizabethtown | Madison   | Capital City | Somerset-<br>Pulaski | Danville<br>Boyle County |
|---------------------|-----------------------|------------|---------------|-----------|--------------|----------------------|--------------------------|
| Total Revenue       | Years                 | Years      | Years         | Years     | Year         | Years                | Years                    |
|                     | 2001-2004             | 2001-2004  | 2001-2004     | 2001-2004 | 2005         | 2001-2004            | 2002-2005                |
| Local Government    | 47.34%                | 32.11%     | 10.34%        | 6.63%     | 0.00%        | 1.65%                | 13.71%                   |
| State Government    | 41.21%                | 0.59%      | 0.00%         | 24.54%    | 37.12%       | 90.06%               | 13.23%                   |
| Federal Government  | 0.00%                 | 18.02%     | 27.39%        | 62.11%    | 12.09%       | 0.00%                | 47.10%                   |
| Other Grants        | 0.00%                 | 0.00%      | 46.58%        | 1.06%     | 5.90%        | 0.00%                | 0.00%                    |
| <b>Total Grants</b> | 88.56%                | 50.72%     | 84.31%        | 94.34%    | 55.11%       | 91.72%               | 74.04%                   |
| Interest Income     | 1.77%                 | 0.75%      | 0.67%         | 0.28%     | 0.00%        | 0.05%                | 0.80%                    |
| Operating Revenue   | 9.67%                 | 48.52%     | 15.02%        | 5.38%     | 44.89%       | 8.23%                | 25.16%                   |
| Total Revenue       | 100%                  | 100%       | 100%          | 100%      | 100%         | 100%                 | 100%                     |

| l otal Revenue      | 100       | 100%           | 100%           | 100%                     | 100% 1                  | 100% 100%           |
|---------------------|-----------|----------------|----------------|--------------------------|-------------------------|---------------------|
|                     |           |                |                |                          |                         |                     |
|                     | Bardstown | Bowling Green- | Ashland-Boyd   | Mt. Sterling -           | Hopkinsville            | Louisville Regional |
| Percentage of       | Nelson    | Warren County  | Asilialia-Boya | <b>Montgomery County</b> | <b>Christian County</b> | Bowman Field        |
| Total Revenue       | Years     | Years          | Years          | Years                    | Years                   | Years               |
|                     | 2001-2004 | 2001-2004      | 2001-2004      | 2001-2004                | 2001-2004               | 2001-2004           |
| Local Government    | 11.51%    | 24.96%         | 3.79%          | 6.27%                    | 13.78%                  | 0.00%               |
| State Government    | 38.55%    | 0.35%          | 5.36%          | 65.78%                   | 7.06%                   | 0.00%               |
| Federal Government  | 17.86%    | 5.34%          | 0.00%          | 23.50%                   | 77.05%                  | 0.00%               |
| Other Grants        | 0.00%     | 5.54%          | 17.51%         | 0.00%                    | 0.00%                   | 41.06%              |
| <b>Total Grants</b> | 67.92%    | 36.20%         | 26.67%         | 95.55%                   | 97.89%                  | 41.06%              |
| Interest Income     | 0.48%     | 0.41%          | 0.11%          | 0.35%                    | 0.01%                   | 0.00%               |
| Operating Revenue   | 31.60%    | 63.39%         | 73.22%         | 4.10%                    | 2.10%                   | 58.94%              |
| Total Revenue       | 100%      | 100%           | 100%           | 100%                     | 100%                    | 100%                |

#### Assessment

- Project does not meet criteria for FAA funds
- → FAA cannot fund every project on state's wish list—this project is one of many projects the state has proposed for federal funding
- → FAA very concerned about maintaining a viable air transportation system
- → No compelling need for a new airport in Shelby County to justify use of scarce federal funds available to Kentucky
- → Community's air transportation needs being met by existing airports that are close by, have the facilities required by business aviation, and are equipped for all weather operations
- Proposed airport will not attract levels and kinds of operations projected in feasibility study—it will be a continued burden on Shelby County taxpayers
- → Sponsor must sign agreement with FAA that it will continue as airport once grants are received ("Sponsor Assurances")



### Backup



### NPIAS Airports in Kentucky Counties

#### Over 59 percent (71 of 120) of the Counties in Kentucky Do Not Have a NPIAS Airport

|              |            | i 33 pei       |
|--------------|------------|----------------|
| County       | Population | NPIAS          |
|              | -          | Airports       |
| Adair        | 17,244     | 0              |
| Allen        | 17,800     | 0              |
| Anderson     | 19,111     | 0              |
| Ballard      | 8,286      | 0              |
| Barren       | 38,033     | 1              |
| Bath         | 11,085     | 0              |
| Bell         | 30,060     | 1              |
| Boone        | 85,991     | 1 <sup>P</sup> |
| Bourbon      | 19,360     | 0              |
| Boyd         | 49,752     | 0              |
| Boyle        | 27,697     | 0              |
| Bracken      | 8,279      | 0              |
| Breathitt    | 16,100     | 1              |
| Breckinridge | 18,648     | 1              |
| Bullitt      | 61,236     | 0              |
| Butler       | 13,010     | 0              |
| Caldwell     | 13,060     | 1              |
| Calloway     | 34,177     | 1              |
| Campbell     | 88,616     | 0              |
| Carlisle     | 5,351      | 0              |
| Carroll      | 10,155     | 0              |
| Carter       | 26,889     | 0              |
| Casey        | 15,447     | 0              |
| Christian    | 72,265     | 1              |
| Clark        | 33,144     | 0              |
| Clay         | 24,556     | 0              |
| Clinton      | 9,634      | 0              |
| Crittenden   | 9,384      | 1              |
| Cumberland   | 7,147      | 0              |
| Daviess      | 91,545     | 1 <sup>C</sup> |

|           | 120) 01 tile | Countil                       |
|-----------|--------------|-------------------------------|
| County    | Population   | NPIAS<br>Airports             |
| Edmonson  | 11,644       | 0                             |
| Elliott   | 6,748        | 0                             |
| Estill    | 15,307       | 0                             |
| Fayette   | 260,512      | 1 <sup>P</sup>                |
| Fleming   | 13,792       | 0                             |
| Floyd     | 42,441       | 0                             |
| Franklin  | 47,687       | 1                             |
| Fulton    | 7,752        | 1                             |
| Gallatin  | 7,870        | 0                             |
| Garrard   | 14,792       | 0                             |
| Grant     | 22,384       | 0                             |
| Graves    | 37,028       | 1                             |
| Grayson   | 24,053       | 1                             |
| Green     | 11,518       | 0                             |
| Greenup   | 36,891       | 0                             |
| Hancock   | 8,392        | 0                             |
| Hardin    | 94,174       | 1                             |
| Harlan    | 33,202       | 1                             |
| Harrison  | 17,983       | 1                             |
| Hart      | 17,445       | 0                             |
| Henderson | 44,829       | 1                             |
| Henry     | 15,060       | 0                             |
| Hickman   | 5,262        | 0                             |
| Hopkins   | 46,519       | 1                             |
| Jackson   | 13,495       | 0                             |
| Jefferson | 693,604      | 1 <sup>P</sup> 1 <sup>R</sup> |
| Jessamine | 39,041       | 0                             |
| Johnson   | 23,445       | 0                             |
| Kenton    | 151,464      | 0                             |
| Knott     | 17,649       | 0                             |

| <u> </u>   | <b>5</b>   | NPIAS          |
|------------|------------|----------------|
| County     | Population | Airports       |
| Knox       | 31,795     | 0              |
| Larue      | 13,373     | 0              |
| Laurel     | 52,715     | 1              |
| Lawrence   | 15,569     | 0              |
| Lee        | 7,916      | 0              |
| Leslie     | 12,401     | 0              |
| Letcher    | 25,277     | 0              |
| Lewis      | 14,092     | 0              |
| Lincoln    | 23,361     | 1              |
| Livingston | 9,804      | 0              |
| Logan      | 26,573     | 1              |
| Lyon       | 8,080      | 0              |
| Madison    | 70,872     | 1              |
| Magoffin   | 13,332     | 0              |
| Marion     | 18,212     | 0              |
| Marshall   | 30,125     | 1              |
| Martin     | 12,578     | 1              |
| Mason      | 16,800     | 1              |
| McCracken  | 65,514     | 1 <sup>P</sup> |
| McCreary   | 17,080     | 1              |
| McLean     | 9,938      | 0              |
| Meade      | 26,349     | 0              |
| Menifee    | 6,556      | 0              |
| Mercer     | 20,817     | 0              |
| Metcalfe   | 10,037     | 0              |
| Monroe     | 11,756     | 1              |
| Montgomery | 22,554     | 1              |
| Morgan     | 13,948     | 1              |
| Muhlenberg | 31,839     | 1              |
| Nelson     | 37,477     | 1              |

| IAO Ali port |            |                   |  |  |  |  |  |  |
|--------------|------------|-------------------|--|--|--|--|--|--|
| County       | Population | NPIAS<br>Airports |  |  |  |  |  |  |
| Nicholas     | 6,813      | 0                 |  |  |  |  |  |  |
| Ohio         | 22,916     | 1                 |  |  |  |  |  |  |
| Oldham       | 46,178     | 0                 |  |  |  |  |  |  |
| Owen         | 10,547     | 0                 |  |  |  |  |  |  |
| Owsley       | 4,858      | 0                 |  |  |  |  |  |  |
| Pendleton    | 14,390     | 1                 |  |  |  |  |  |  |
| Perry        | 29,390     | 1                 |  |  |  |  |  |  |
| Pike         | 68,736     | 1                 |  |  |  |  |  |  |
| Powell       | 13,237     | 1                 |  |  |  |  |  |  |
| Pulaski      | 56,217     | 1                 |  |  |  |  |  |  |
| Robertson    | 2,266      | 0                 |  |  |  |  |  |  |
| Rockcastle   | 16,582     | 0                 |  |  |  |  |  |  |
| Rowan        | 22,094     | 1                 |  |  |  |  |  |  |
| Russell      | 16,315     | 1                 |  |  |  |  |  |  |
| Scott        | 33,061     | 1                 |  |  |  |  |  |  |
| Shelby       | 33,337     | 0                 |  |  |  |  |  |  |
| Simpson      | 16,405     | 0                 |  |  |  |  |  |  |
| Spencer      | 11,766     | 0                 |  |  |  |  |  |  |
| Taylor       | 22,927     | 1                 |  |  |  |  |  |  |
| Todd         | 11,971     | 0                 |  |  |  |  |  |  |
| Trigg        | 12,597     | 0                 |  |  |  |  |  |  |
| Trimble      | 8,125      | 0                 |  |  |  |  |  |  |
| Union        | 15,637     | 1                 |  |  |  |  |  |  |
| Warren       | 92,522     | 1                 |  |  |  |  |  |  |
| Washington   | 10,916     | 1                 |  |  |  |  |  |  |
| Wayne        | 19,923     | 1                 |  |  |  |  |  |  |
| Webster      | 14,120     | 0                 |  |  |  |  |  |  |
| Whitley      | 35,865     | 0                 |  |  |  |  |  |  |
| Wolfe        | 7,065      | 0                 |  |  |  |  |  |  |
| Woodford     | 23,208     | 0                 |  |  |  |  |  |  |
|              |            |                   |  |  |  |  |  |  |

P = Primary airport; R = Reliever airport; C = Commercial service airport



## NPIAS Development Needs for Airports in Kentucky

#### **Primary and Commercial Service Airports**

| City       | Airport                                  | LocID  | Role    |        | Year 5     |         | 2005-2009     |  |  |  |
|------------|--|--|---------|--------|------------|---------|---------------|--|--|--|
| City       | Allport                                  | LOCID  | Current | Year 5 | Enplaned   | Bsd Aft | Dev Cost      |  |  |  |
| Covington  | Cincinnati Northern Kentucky Intl        | CVG  | PR      | PR     | 14,112,455 | 9       | \$133,857,693 |  |  |  |
| Lexington  | Blue Grass Field                         | LEX  | PR      | PR     | 578,104    | 127     | \$26,775,205  |  |  |  |
| Louisville | Louisville International-Standiford Fiel | SDF  | PR      | PR     | 2,186,746  | 68      | \$281,172,000 |  |  |  |
| Owensboro  | Owensboro-Daviess County                 | OWB  | CM      | CM     | 8,803      | 111     | \$19,620,002  |  |  |  |
| Paducah    | Barkley Regional                         | PAH  | PR      | PR     | 30,281     | 65      | \$12,769,103  |  |  |  |
|            | T  | Total for Primary and Commercial Service Airports: |         |        |            |         |               |  |  |  |

#### Reliever and General Aviation Airports

| Oit.          | A inva aut                           | LooiD | Ro      | le     | Year 5         | 2005-2009   |
|---------------|--------------------------------------|-------|---------|--------|----------------|-------------|
| City          | Airport                              | LocID | Current | Year 5 | Based Aircraft | Dev Cost    |
| Ashland       | Ashland-Boyd County                  | DWU   | GA      | GA     | 51             | \$3,449,051 |
| Bardstown     | Samuels Field                        | BRY   | GA      | GA     | 24             | \$798,889   |
| Bowling Green | Bowling Green-Warren County Regional | BWG   | GA      | GA     | 75             | \$962,597   |
| Cambellsville | Taylor County                        | AAS   | GA      | GA     | 14             | \$958,889   |
| Cynthiana     | Cynthiana-Harrison County            | 018   | GA      | GA     | 31             | \$925,926   |
| Danville      | Stuart Powell Field                  | DVK   | GA      | GA     | 41             | \$3,128,182 |
| Elizabethtown | Addington Field                      | EKX   | GA      | GA     | 57             | \$1,503,543 |
| Falmouth      | Gene Snyder                          | K62   | GA      | GA     | 23             | \$611,111   |
| Flemingsburg  | Fleming-Mason                        | FGX   | GA      | GA     | 30             | \$4,633,582 |
| Frankfort     | Capital City                         | FFT   | GA      | GA     | 83             | \$3,639,170 |
| Fulton        | Fulton                               | 1M7   | GA      | GA     | 11             | \$6,477,778 |
| Georgetown    | Georgetown-Scott County              | 27K   | GA      | GA     | 59             | \$795,555   |
| Gilbertsville | Kentucky Dam State Park              | M34   | GA      | GA     | 4              | \$2,361,112 |
| Glasgow       | Glasgow Municipal                    | GLW   | GA      | GA     | 27             | \$1,055,556 |
| Greenville    | Muhlenberg County                    | M21   | GA      | GA     | 19             | \$1,488,667 |
| Hardinsburg   | Breckinridge County                  | 193   | GA      | GA     | 3              | \$1,663,333 |
| Harlan        | Tucker-Guthrie Memorial              | 135   | GA      | GA     | 6              | \$3,391,111 |
| Hartford      | Ohio County Airport                  | 7K4   | GA      | GA     | 2              | \$2,707,133 |
| Hawesville    | New                                  |       |         | GA     | 0              | \$1,052,632 |
| Hazard        | Wendell H. Ford                      | K20   | GA      | GA     | 35             | \$5,696,422 |



## NPIAS Development Needs for Airports in Kentucky

#### Reliever and General Aviation Airports (continued)

| City           | Airport   | LocID | Role    |        | Year 5         | 2005-2009   |
|----------------|---|-------|---------|--------|----------------|-------------|
|                |   | LOCID | Current | Year 5 | Based Aircraft | Dev Cost    |
| Henderson      | Henderson City-County                             | EHR   | GA      | GA     | 21             | \$2,267,649 |
| Hopkinsville   | Hopkinsville-Christian County                     | HVC   | GA      | GA     | 48             | \$4,038,872 |
| Jackson        | Julian Carroll                                    | JKL   | GA      | GA     | 5              | \$2,175,248 |
| Jamestown      | Russell County                                    | K24   | GA      | GA     | 10             | \$1,631,802 |
| Leitchfield    | Grayson County                                    | M20   | GA      |        | 0              | \$1,290,000 |
| Liberty        | New   |       |         | GA     | 10             | \$1,052,632 |
| London         | London-Corbin Airport Magee Field                 | LOZ   | GA      | GA     | 77             | \$1,325,843 |
| Louisville     | Bowman Field                                      | LOU   | RL      | RL     | 361            | \$2,800,000 |
| Madisonville   | Madisonville Municipal                            | 210   | GA      | GA     | 19             | \$2,114,000 |
| Marion         | Marion-Crittenden County                          | 5M9   | GA      | GA     | 3              | \$878,697   |
| Mayfield       | Mayfield-Graves County                            | M25   | GA      | GA     | 13             | \$1,955,555 |
| Middlesboro    | Middlesboro-Bell County                           | 1A6   | GA      | GA     | 45             | \$913,826   |
| Monticello     | Wayne County                                      | EKQ   | GA      | GA     | 17             | \$1,666,273 |
| Morehead       | Morehead-Rowan County                             | 132   | GA      | GA     | 12             | \$777,778   |
| Mount Sterling | Mt Sterling-Montgomery County                     | IOB   | GA      | GA     | 67             | \$4,129,609 |
| Murray         | Kyle-Oakley Field                                 | CEY   | GA      | GA     | 34             | \$1,129,997 |
| Pikeville      | Pike County-Hatcher Field                         | PBX   | GA      | GA     | 28             | \$4,387,111 |
| Pine Knot      | McCreary County Airport                           | 181   | GA      | GA     | 6              | \$2,948,852 |
| Prestonburg    | Big Sandy Regional                                | K22   | GA      | GA     | 24             | \$1,876,896 |
| Princeton      | Princeton-Caldwell County                         | 2M0   | GA      | GA     | 5              | \$2,628,889 |
| Richmond       | Madison County                                    | 139   | GA      | GA     | 42             | \$1,888,889 |
| Russellville   | Russellville-Logan County                         | 4M7   | GA      | GA     | 16             | \$2,594,444 |
| Somerset       | Somerset-Pulaski County                           | SME   | GA      | GA     | 50             | \$1,048,111 |
| Springfield    | Lebanon-Springfield                               | 612   | GA      | GA     | 19             | \$6,695,910 |
| Stanton        | Stanton   | 150   | GA      | GA     | 23             | \$1,967,530 |
| Sturgis        | Sturgis Municipal                                 | 105   | GA      | GA     | 19             | \$1,375,843 |
| Tompkinsville  | Tompkinsville-Monroe County                       | TZV   | GA      | GA     | 3              | \$809,000   |
| Warsaw         | New   |       |         | GA     | 0              | \$5,263,158 |
| West Liberty   | West Liberty                                      | 913   | GA      | GA     | 4              | \$928,875   |
| Williamsburg   | New - Whitley County Airport                      |       |         | GA     | 0              | \$789,474   |
|                | Total for Reliever and General Aviation Airports: |       |         |        |                |             |

Source: FAA National Integrated Plan of Airport Systems



#### Richard Golaszewski

Richard Golaszewski is an Executive Vice President of GRA, Incorporated. He has developed expertise in the areas of aviation economics, safety and public policy. Mr. Golaszewski has studied the economics of airports, airlines, aircraft manufacturing and safety. He has testified in front of the U.S. Congress on aviation and aerospace technology economics and public policies.

Mr. Golaszewski specializes in the application of economic, financial and statistical analysis to the transportation industry for both private and public sector clients. He supports the Federal Aviation Administration (FAA) in economic, policy and safety analyses, and has done so for almost 30 years. He also has assessed the financial condition of U.S. airports and developed the economic criteria used in benefit-cost analyses of FAA-funded investments.

Mr. Golaszewski also has a number of airport-related clients who he assists in benefit-cost analysis, economic impact analysis, air services development and related matters

Mr. Golaszewski is a member of the Aviation Economics and Forecasting Committee of the Transportation Research Board, American Association of Airport Executives, the Public Policy Committee of the American Institute of Aeronautics and Astronautics, the Vietnam Helicopter Pilots Association and the Air Traffic Control Association. In 2004, he completed his second and final three-year term as a member of the Aeronautics and Space Engineering Board, an arm of the National Research Council. In 2003, he was appointed as a Lifetime National Associate of the National Academy of Sciences because of his significant pro bono involvement in National Research Council activities.

Mr. Golaszewski received a B.S. in Accounting (magna cum laude) from LaSalle College and an M.P.A. in Public Sector Management and Finance from the Wharton School, University of Pennsylvania. He was a military officer and helicopter pilot from 1967 to 1972.



GRA, Incorporated July 20, 2005

#### **GRA Aviation Qualifications**

GRA is one of the oldest firms in the United States specializing in strategic advice and financial analysis relating to air transportation. Since its founding in 1972, the firm has played a leading role in helping shape important industry developments including deregulation, privatization and international consolidation within the airline industry. The firm has also played a prominent role in modernizing the regulatory framework for the air transportation industry, and is now the chief economic counsel to the U.S. Federal Aviation Administration.

Over the past 25 years, GRA has provided economic counsel to the Federal Aviation Administration and the U.S. Department of Transportation on numerous issues including:

- → Examining the cost of FAA programs and the levels of services to aviation users
- → Establishing economic criteria for regulatory and investment decision-making
- → Calculating the economic effects of regulatory initiatives
- → Assessing the financial viability of U.S. airports and airlines
- → Policy analysis of market-based solutions to address airport congestion
- → Evaluation of the High Density Rule (HDR)

In all assignments, GRA has integrated its working knowledge of the industry with the application of sophisticated economic tools in order to help the government reach regulatory and investment decisions.

GRA is supporting the multi-agency Joint Planning and Development Office in developing the next generation air transportation system.

GRA provides several types of services to help airports realize their potential: Air services development, airport investment, pricing and cost allocation, privatization and airport finance, investment and financial analysis, analysis of carrier economic issues, and aviation forecasting.



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