

APPENDIX 1

1. Methodologies Employed by Consultant

The methodologies which were employed by Consultant and specified in the Consultant Agreement follow:

Gathering the Facts and Collecting Data Upon Which to Base Some Findings

Consultant prepared a series of questions that were posed to the planning staff, including such things as:

1. What is the precise structure of the County, State and Commission Planning authority and how does it operate?
2. Is the Commission a creature of State of Maryland authority? Does the State have ultimate control over what the Commission can and cannot do, with respect to land use planning generally, and airport land use planning, specifically?
3. Is there an overall Master Plan for land use for Prince George's County? If so, has the Commission closely followed the Master Plan? Further, does the Master Plan, if one exists, undertake to control or regulate growth or development in airport environs?
4. Does the Commission have any authority over or control over the four airports in question (Potomac, Washington Executive/Hyde Field, Freeway or College Park Airports), as to what activities the airport may engage in? If so, what is that authority and how is it exercised?
5. What conditions, restrictions or other constraints are typically placed on land use within the areas around an airport in Prince George's County and what is the authority for such conditions or restrictions?
6. What is the Commission or staff knowledge about existing land uses and proposed land uses around the airports in question? What agencies were involved in approving existing land uses? Are there any currently proposed land uses which have raised concerns among the staff or the Commission as those concerns would relate to airport noise or annoyance, safety, health or public welfare?
7. To the knowledge of the Commission or staff, has any County, municipality, or other governmental entity in Maryland undertaken to restrict or regulate property uses in airport neighborhoods, either before or after the airports were in place? If so, by what authority, and have such actions been effective?
8. Does the "building department" of the County require any special changes in house or building plans as a condition of building plan approvals?

9. Has the Commission or staff had direct contact with the Federal Aviation Administration concerning airport activities, in connection with Federal Aviation Regulations Parts 61, 77, 91, 150, or otherwise? Have any of those regulations been made a part, directly or indirectly, of any land use approvals for property near airports in the Commission's area?
10. Have any recent situations occurred that has sharpened the Commission's concerns about airport land use compatibility? If so, what were those situations, and what actions did the Commission take? Are the concerns related to liability issues, citizens' complaints, airport operators or users' complaints or what? Summarize what community input has been made concerning either aircraft safety or noise and annoyance issues.
11. Other than the "Potomac Airfield Report" of June 1999 and the Michael Baker Corporation study, has the Commission employed any other person, firm or corporation to do any studies similar to the one proposed in this RFP, or asked any such entity to prepare any mitigation or resolution strategies for land use situations. If so, who was employed, what was done, and what were the recommendations? Has the Commission acted on any of the studies? If so, in what way? If the recommendations have not been instituted, why not?
12. In general terms, how would the Commission staff describe the relationships between the four airports involved and their managers or owners, and the Commission or its staff?
13. If there are current incursions of development in what may seem to be too close to the airports involved and their operations, has there been any dialogue with the developers/owners concerning the issues? If so, what responses have the developers/owners had to such dialogue?
14. Does staff have any current views as to the recommendations made in the "Potomac Airfield Report" of June 1999, and other issues raised by the Report? What has been the reaction to the Report from the Commission, any airport owners/managers and the public, in general terms?

The Commission staff briefed members of the Consultant for an entire day, and continued providing valuable input in person, by telephone and electronic mail all during the course of the study by Consultant. The insight provided by the staff to the Consultant was critical to the overall understanding of the issues by Consultant.

Consultant asked for and received certain maps and GIS materials from Commission staff so that it would be prepared to render returns to the staff that would be compatible with staff maps and other data bases.

Quantifying Existing Airport Uses and Operations

Members of Consultant met with managers or owners of the four airports involved, toured by land the environs of the airports, talked or corresponded with some airport neighbors, and developers in one case, did a "fly-in" by small aircraft to each of the airports, and became conversant with each of the areas, using information gained in the staff briefing as part of the backdrop for the questions posed to the airport managers or owners. In addition, Consultant did an intensive review of the "Potomac Airfield Report of June 1999," (the "Report") and undertook to confirm the findings of that Report, which served as a guide to evaluate facts at the other three airports involved—Washington Executive/Hyde Field, College Park and Freeway.

Consultant asked each of the airport managers or owners, either in person or by letter, a series of questions, which included the following:

1. Has your airport been inspected or audited by representatives of the Federal Aviation Administration (FAA) within the past year? If so, with what result? Please show your airport operating certificate, if any, together with any written conditions or restrictions attached.
2. Have you experienced any aircraft incidents or accidents at the airport in the past ten years? If so, what was the nature of those incidents or accidents, was they investigated by either the Federal Aviation Administration ("FAA"), or the National Transportation Safety Board ("NTSB")? Were any persons injured or was any property damaged in any accident or incident, either on or off airport property?
3. Are you concerned with the recent land developments in the vicinity of the airport? Have you taken any actions in connection with any recent land development? Have you received complaints from airport neighbors concerning noise, pollution or aircraft overflights? Are any complaints, if any, related to safety concerns?
4. Describe and give the number of aircraft and airport users based at your field and what they do—flight schools, aircraft repair, aircraft rental, fuel suppliers, etc. How many aircraft, and of what type, are based at the airport? What plans for expansion among the airport users are you aware of? What will be your response to any such plans?
5. In real terms, do you have much control over the operations of airport users? If so, how is that control manifested—through leases, licenses or other contracts? Do you have much "transient" traffic—that is, aircraft not based at the airport?
6. Do you make a practice of appearing at Commission hearings or proceedings when land near the airport is being considered for development, zoning, or otherwise?
7. Would you and your ownership support an overarching airport compatibility land use planning initiative? Why or why not?

8. Has your ownership considered the acquisition of additional "clear zones" or other property adjacent to or near the airport property? If so, has there been any approach to any land owners and with what result?
9. Have you read the contents of the "Potomac Airfield Report" of June 1999? Do you have any comments about the final recommendations made in that Report? Would you support any one of the alternatives suggested in the Report? If so, which one, and why?
10. How would you characterize your relationship with your airport neighbors, the M-NCPPC, and the Maryland Aviation Administration or any other regulatory authority?

Following is a list of processes used by Consultant to quantify existing airport uses and operations:

- Identify and chart current flight track designs for each airport.
- Review charts, approach plates, VFR (Visual Flight Rules) arrival and departure procedures; review IFR (Instrument Flight Rules) departure and arrival procedures.
- Determine the existence and use of all NAVAIDS (navigational aids) at each airport, together with hours and days of use, if not 24 hours daily.
- List all operations constraints, both mandatory and suggested.
- Query airport operators on engine run-ups, preferential runway requests/uses.
- Review the sizes and types of aircraft that use the airports.
- Review tower or unicom communication procedures, weather observations and reports.
- Review airport grant assurances, if any.
- Review airport leases, use permits and other agreements for tenants/users of all the airports, if available.
- Review noise abatement procedures, if any.
- Ask about recent airport-related complaints from citizens, airport neighbors, others.
- Obtain reliable estimates of the number of all operations (arrivals and departures) for the last three years, together with landing fee data, if any. Undertake to resolve conflicts between the number of operations reported by the airport operator and the Maryland Aviation Administration ("MAA").
- Review all services provided at each airport, e.g. aircraft maintenance and repair, FBOs (Fixed Base Operators), flight schools, aircraft hangars, tie-downs, number of transient aircraft operations, fuel operations, location and any other commercial activity at the airports.
- List, plot, and write up all probable causes (if available) of all aircraft accidents within a 10-mile radius for the last ten years.
- List any damages, deaths, or injuries or property losses suffered to persons or property as a direct result of aircraft operations, either on or off the immediate airport environs in the last ten years, and estimated an approximate dollar loss, irrespective of who bore such loss, as to each such occurrence.

Consultant prepared a list of questions and conducted a sample survey of residents who lived in the areas near the four airports involved. Telephone surveys were conducted and the results tabulated. The purpose of this survey was to determine whether there was any significant noise, annoyance, or pollution perceived by airport neighbors.

Consultant made use of an exhaustive aircraft accident study by the University of California, Berkeley, which was heavily relied upon in the California Department of Transportation Land Use Planning Handbook (dated 1993). The findings of that study confirmed what is known by experts throughout the aviation community—that is, most general aviation accidents occur either during take-off or landing, and that the majority of accidents happen within 5 miles of the airport.

Consultant obtained information as to accidents and major incidents occurring at the four airports involved, and updated, insofar as possible, information from the National Transportation Safety Board (“NTSB”), Federal Aviation Administration (“FAA”), Maryland Aviation Administration (“MAA”) and other existing data bases. Then, Consultant plotted the incidences as shown in the UC-Berkeley model. Consultant then undertook to compare the national statistics/data with accident data from the four airports involved. Consultant then tried to draw conclusions of the risks to persons and property on the ground, pilots and passengers in aircraft—all of which would attend approach, departure, climb-out, descent, and other aircraft movements at or near the four airports involved in *this* study.

As part of the data collection, Consultant considered existing conditions and the level and nature of operations, particularly at those airports that have training operations and low-time or part-time pilots using the fields.

Using studies done by the University of California-Berkeley, as adopted by Hodges & Shutt, accident probability charts were constructed for the four airports, using a system of creating six distinct zones or areas related to each airport, then applying methods of predictive analyses to each of the zones as to each airport.

Also, Consultant recognized that two of the airfields, Potomac and Washington Executive (“Hyde Field”) were only a short flying distance from Andrews AFB and Reagan-Washington National Airport, and assessed risks related to that proximity.

Consultant identified a number of airport land use studies in various parts of the United States for review—California, the Airport Land Use Handbook, by Hodges & Shutt for California Department of Transportation (CALTRANS) (1993); Denver (Colorado) Council of Governments (DRCOG) (1998), Sacramento (California) Area Council of Governments (SACOG); Washington State Transportation Department, Aviation Division; State of Oregon Transportation Department; a Hartford (Connecticut) Request for Proposals on Airport Land Use Issues; San Diego (California) Council of Governments (SANDAG); Puget Sound Regional Council (Washington); State of North Dakota Aeronautics Commission; and two Federal Aviation Administration planning initiatives—one in the Southern Region, FAA; and one at FAA in Washington (see FAA Docket 29231). Also the Aircraft Owners and Pilots Association (AOPA) materials in its Land Use and Airport Noise booklet and the AOPA Air Safety Foundation publication on general aviation accidents, was reviewed.

The studies were reviewed as part of an overall investigation into the “state-of-the-art” of airport land use compatibility issues, that might lead to possible recommendations as to how the Commission might proceed in solving some current and future airport incompatibility problems.

Also, for the purpose of suggesting enabling legislation or regulation, both as to overall land use control and as to airport (and airport environs) land use control, a number of state statutes, law review articles, and cases.

In addition, Consultant communicated with every state aeronautical agency asking a series of questions concerning the involvement of state agencies with local government agencies in airport land use compatibility matters. Results of those responding were tabulated and presented in Appendix 2 to this Report.

The review and write-up have created the fundamentals of an Airport Land Use Compatibility Manual, and the series of concerns that must be addressed in preparing such a Manual and an outline of what such a Manual should cover. Appendices attached are samples or models of what is being done around the country in this area, and provide some guidance as Prince George's County determines its course of action.

APPENDIX 2a

Text of Message to State Airport Offices/Directors

We're doing a study on the "state-of-the-art" regarding Airport Land Use Compatibility policies and practices. Particularly, we are interested in the following:

- 1) Do you, as the state aeronautics agency, provide any Handbook or other materials to local governments concerning Airport Land Use Compatibility?
If yes, is this done as a "courtesy" or as a result of a legislative "mandate?"
- 2) Are you aware of any innovative techniques that have been used by local governments in your state to discourage or prohibit incompatible land uses near public or private airports?
What are they? Did they work?
- 3) How would you advise local governments to proceed if they are faced with an existing Airport Land Use incompatibility?

If you have any printed materials on these subjects, I would appreciate your sending a copy by mail or FAX, together with some short answers to the questions above.

Appendix 2b—Summary of State Aviation Responses

(Exact texts on file with Consultant)

State	Do They Have Materials To Send to cities/counties?	Any Strategies?	Advice for Incompatible Land Uses
AK	No	Enforce FAA Rules	No particular info./FAA
AR	No	No	Refer to FAA
CA	Yes, HB	Several As Described in HB	See HB