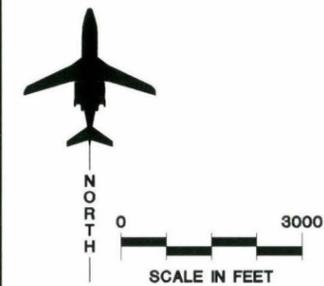


**LEGEND**

- Detailed Land Use Study Area
- Municipal Boundary
- Airport Property
- Georgetown Jurisdictional Boundary
- 65+ DNL Contour
- Overlay Zone 1
- Approach Surfaces
- Overlay Zone 2
- Horizontal Surface/Airport Planning Area
- Overlay Zone 3

Source: City of Georgetown, Department of Geographic Information Systems. Coffman Associates Analysis



**Exhibit 6G  
RECOMMENDED NOISE  
OVERLAY ZONES**

right to direct aircraft over the property and thus to make noise. These easements serve notice that the property is subject to aircraft noise which may, at times, infringe on a resident's enjoyment of property and may, depending on the degree of acoustical treatment of the dwelling and the individual's sensitivity to noise, affect his or her well-being. The easement should state clearly that noise levels might increase in the future and that flight patterns or operating times might change. A noise and aviation easement often includes a covenant waiving the property owner's right to sue the airport proprietor for disturbances caused by aircraft noise.

The subdivision review process is an ideal time to secure easements and require the recording of covenants. In this way, subdivision regulations could be used in support of airport compatibility overlay zoning.

- EVALUATION

The City of Georgetown has adopted subdivision regulations which apply not only to the city, but also the city's EJT; therefore, the entire airport planning area falls under the jurisdiction of these regulations.

The subdivision regulations adopted by the city currently contain a provision which requires that an aviation easement be placed on all final plats within two miles of Georgetown Municipal Airport. The purpose of this easement is to place height restrictions on development to ensure the safety of both pilots flying into the airport and

residents living in proximity to the airport.

For the purpose of making future residents of the airport planning area aware of the noise produced by the airport, it would be appropriate for the city to amend its subdivision regulations to enhance the already required aviation easement by changing it to include a provision for noise. This would make future residents aware of not only the height restrictions imposed by the presence of the airport, but also the noise produced by the airport.

- CONCLUSION

The City of Georgetown could consider amending their current subdivision regulations to change the current aviation easement to a noise and aviation easement. A copy of a sample subdivision regulation that contains this type of provision is included in **Appendix E**. This is a viable alternative.

### **Building Codes**

Building codes regulate the construction of buildings, setting standards for materials and construction techniques to protect the health, welfare, and safety of residents. Codes address structural concerns, ventilation, and insulation, each of which influences the noise attenuation capabilities of a building. Building codes commonly apply to both new construction and major alterations.

Building codes can require sound insulation in the construction of noise-sensitive uses in areas subject to high aircraft noise levels. Requirements for sound insulation customarily are applied within the 65 DNL contour with increasingly stringent standards in the 70 and 75 DNL contours. Most sound insulation code standards describe in detail the required improvements needed to achieve a given level of noise reduction.

- EVALUATION

The 1994 edition of the Uniform Building Codes (UBC) has been adopted by the City of Georgetown. Williamson County has not yet adopted building codes; therefore, only the portions of the airport planning area within the city limits would be affected by any changes recommended in this section.

While the zoning alternatives discussed previously would reduce the risk of future noise-sensitive development in the study area, special sound insulation measures may be appropriate in case infill noise-sensitive development should occur. Sound insulation standards would be an effective way to enhance land use compatibility in the airport area, especially if used as part of a comprehensive land use management approach. The airport compatible overlay zoning ordinance could declare which noise-sensitive uses should be sound-insulated within each overlay zone. The specific construction standards would be described in the building code and it would be the duty of the local building inspectors to ensure

that sound insulation is properly installed.

The additional administrative burdens posed by sound insulation standards are not necessarily costly as most local communities already have a building inspection process. It is possible that a need for additional inspections could increase the costs to local regulatory agencies; however, these costs should be covered through inspection fees. Proper administration of these requirements is critical and would require careful inspections and special training for building inspectors.

Sound insulation may cost local builders more than conventional construction; however, most of the additional cost results from the need for acoustical windows. Other sound insulation construction techniques should result in only very minor, if any, cost increase, as they involve primarily special installation techniques with a minimum of unusual or expensive materials. The additional cost of a sound-insulated home is of real value for the future homeowner as a properly sound-insulated home is not only quieter, but also highly energy-efficient. Therefore, the additional costs of sound insulation may be recouped through the marketing process.

At least three approaches may be taken to setting specific sound insulation standards. These are the utilization of: (1) prescriptive standards; (2) flexible standards; or (3) performance standards. These standards are discussed in the following sections. The land use table contained in **Table 6A**

could be used to determine which noise-sensitive land uses should be sound-insulated within each overlay zone.

**Prescriptive Standards:** These are perhaps the most commonly used approach to sound insulation standards. The existing building code could be amended to set forth specific construction standards intended to achieve a given level of noise reduction. It would be the duty of local building inspectors to ensure that correct materials are used and construction is done properly. After installation and a successful inspection, the building is presumed to be able to achieve the targeted level of noise reduction.

**Flexible Code Standards:** These standards would describe the required "sound transmission class" (STC) rating of all building components. STC is a system for rating the effectiveness of partitions, floors, ceilings, windows, and doors in attenuating the transmission of sound. The ratings are determined through standardized laboratory tests of sound transmission at various frequencies. The higher the STC rating, the better the sound reduction. A builder would be free to use any materials desired as long as evidence is provided that the required STC rating has been met.

Jurisdictions desiring to undertake such an approach should retain the assistance of a qualified acoustical engineer in developing the standards. The objective of the regulations should be to specify the STC ratings of various building components needed to achieve an overall noise level reduction of 25 to

30 decibels, depending on the noise contour where the proposed development is located.

**Performance Standards:** A performance-based standard would focus on the final result to be achieved by the construction. The standard would describe the required outdoor-to-indoor noise reduction. The builder could use any materials or techniques he desires as long as he can certify that the plans and final construction meet the standard. This would require the assistance of an acoustical engineer in designing the building and checking construction. It would also require testing the building after construction.

The performance standards could be set in the zoning ordinance and would be particularly easy to administer in the case of conditional uses, special uses, and planned developments. These kinds of developments are already subject to special reviews and performance standards.

The advantage of this approach is that the builder has the flexibility to design the building as he deems best. It also avoids the complexity of drafting, adopting, and administering special sound-insulation building code amendments. In addition, verification of compliance with the requirements is the responsibility of the builder and his engineer. The disadvantage is that the city would have to verify the certifications made by the builder and the engineer. Builders also may lack confidence in regulations which are subject to case-by-case verification and approval.

- CONCLUSION

The City of Georgetown could consider amending the current building code to incorporate prescriptive noise standards. Implementation of this alternative would not only protect future noise-sensitive development within the airport planning area, but would also protect structures that undergo extensive remodeling or reconstruction as these types of construction typically require a building permit and inspection. This is a viable alternative.

### **Transfer of Development Rights**

Land ownership actually includes a bundle of rights to the use of that land. These include rights of access, mineral rights, limited rights to the airspace above the land, and rights to develop the land. Transfer of development rights (TDR) is based on the idea that each right has a market value which can be separated and sold without selling the entire property.

TDR was developed as a way to preserve environmentally important areas without having to buy them with public funds. The technique begins by dividing the municipality into sending and receiving zones. The sending zones are areas where environmental preservation and minimal development are desired, and the receiving zones are areas where additional development is preferred. Development rights, measured in terms of development density, are assigned through the zoning ordinance. If developers in the receiving areas can get additional

development rights, they are allowed to build to higher densities than normally allowed by the zoning ordinance. They would buy these rights from landowners in the sending zones. In this way, the public can benefit from preserving environmentally valuable land, the owner of that land can be paid for preserving it, and developers can reap higher profits.

Based on experience with these programs around the country, several conditions for the successful use of TDR have been identified. The receiving districts must be capable of immediate development, the regulatory process must have integrity and be trusted by developers, the regulatory agency must be able to inform and help property owners and developers, and programs must be as simple as possible and facilitate the self-interest of all involved parties. (See "Making TDR Work," by Peter J. Pizor, in the *Journal of the American Planning Association*, Vol. 52, No. 2, Spring 1986.)

A variation of TDR is density transfer zoning. This allows developers of several large tracts of land to move their allotted densities among tracts to reduce densities in areas worthy of preservation. This differs from TDR because only one owner is involved in the transfer, and a system for sale and purchase of development rights is not required. Density transfer zoning often can be achieved through creative use of the planned unit development process.

In rapidly growing areas with large amounts of vacant land, TDR can be an effective tool for airport land use compatibility planning. At no cost to

the taxpayers, it can neatly deal with the problem of what to do with land in high noise zones when there are no practical alternatives to residential development.

TDR is a very complicated technique that is difficult to justify solely for the purposes of airport land use compatibility. If a local jurisdiction is already using or considering TDR, airport compatibility criteria could be included with other environmental criteria in the design of the program.

- EVALUATION

TDR is not currently being used in the City of Georgetown. As discussed in previous sections, current land use planning, in addition to potential revisions to conventional land use regulations, can adequately meet the need for compatible development in the airport area. This is not a viable alternative.

- CONCLUSION

This option need not be considered further.

### **Environmental Zoning**

Special zoning regulations to preserve environmentally sensitive areas or protect development from environmental hazards can also promote land use compatibility near airports. Floodplain overlay zoning, which restricts or prohibits development in all or part of the floodplain, is the most

common form of environmental zoning. Other environmental zoning regulations may include steep slope zoning requiring low development densities and special construction standards, wetland preservation zoning limiting densities and the design of drainage facilities, and groundwater recharge zones limiting building density and lot coverage. All can be used to restrict the development of noise-sensitive uses in environmentally sensitive areas that are also impacted by aircraft noise.

- EVALUATION

Various forms of environmental zoning regulations in the Georgetown area do not directly lend themselves to also promoting airport noise compatibility. This is not a viable alternative.

- CONCLUSION

This option need not be considered further.

### **Fair Disclosure Regulations**

Fair disclosure regulations are not actually land use regulations. They are intended to ensure that prospective buyers of property are informed that the property is or will be exposed to potentially disruptive aircraft noise. It is not uncommon around even major airports for newcomers to report having bought property without having been informed about airport noise levels.

At the most formal level, fair disclosure can be implemented through regula-

tions requiring the seller or his agent to provide a notice of aircraft noise exposure on the real estate listing sheet and at the time that a sales contract is executed. In addition, any easements should be revealed at the time of closing. Although these measures are intended to protect buyers of property from being unaware of aircraft noise, a potential problem is that they can be difficult to enforce.

Fair disclosure regulations can place a serious responsibility on real estate agents and lenders. If the regulations are properly drafted, however, the responsibilities of real estate agents and sellers are clearly defined and should be limited simply to disclosing the airport noise levels or overlay districts affecting the property and directing buyers to airport officials for more information.

Another approach to fair disclosure is to require the recording of a fair disclosure agreement and covenant at the time of rezoning or subdivision plat approval. The agreement would require the property owner to disclose the airport noise situation to prospective buyers. As a covenant running with the land, this requirement would bind all future property owners.

A less direct approach to fair disclosure is to require the dedication of avigation easements or noise and overflight easements as a condition of development approval within high-noise areas. The easements become a restriction on the deed to the property that must be revealed at the closing on subsequent sales. A more limited approach to fair disclosure is to require the recording of a notice with the plats

of new subdivisions in the noise-impacted area. It would identify the subdivision as potentially impacted by aircraft noise and would advise that local planners and airport officials be contacted for the most recent information about noise levels impacting the property. These approaches have been discussed in the airport compatibility overlay zoning and subdivision regulations sections.

#### • EVALUATION AND CONCLUSION

The City of Georgetown and Williamson County should consider adopting a fair disclosure ordinance to ensure that future property owners are aware of the noise produced by the airport prior to purchasing property in the area. Additionally, since avigation easements are already required within the study area, the existing easement could be amended to include fair disclosure of the noise produced by the airport. This easement could be required as a condition of development approval within the airport planning area. These are viable alternatives.

#### EXPENDITURE TECHNIQUES

Land use management techniques involving direct expenditures include the following:

- Property Acquisition
- Sound Insulation
- Noise and Avigation Easement Purchase
- Purchase Assurance

- Sales Assurance
- Development Rights Acquisition

These measures are usually considered as a last resort because they are expensive, often disruptive, and sometimes controversial. They are most often justified when noise impacts are severe and cannot be mitigated through aircraft noise abatement alone. These measures are potentially eligible for FAA funding assistance through the noise set-aside of the Airport Improvement Program (AIP) if they are part of an FAA-approved F.A.R. Part 150 Noise Compatibility Program. In general, to be eligible for FAA approval, these programs can apply only to the areas within the 65 DNL contour based on existing conditions or the five-year forecast conditions, whichever is greater. Beginning October 1, 1998, the FAA approves remedial mitigation measures under Part 150 only for noncompatible development that exists as of that date. Noncompatible development that potentially may occur on or after October 1, 1998, may only be addressed in Part 150 programs with preventative noise mitigation measures.

### **Property Acquisition**

Acquisition and clearance of noise-sensitive land uses impacted by high noise levels is one method of ensuring noise compatibility around an airport. The intent of acquisition is to remove residents from severely noise-impacted areas and to prevent incompatible uses from being developed near the airport. This can be an effective way to ensure complete noise compatibility around an

airport, although it can be very expensive.

Under federal regulations, land may be acquired for noise mitigation, with funding through the noise set-aside of the Federal Airport Improvement Program, if it is within the 65 DNL contour and has been developed for noise-sensitive land uses. Acquisition of undeveloped land may also be eligible if compatible use zoning and subsequent compatible development are not considered practical. The FAA actively supports airport ownership of land impacted by noise above 75 DNL. While acquisition of areas impacted by noise down to 65 DNL is eligible for federal funding assistance, it can be difficult to establish a high priority with the FAA for funding the acquisition of property outside the 70-75 DNL contour. Eligible sponsors for grant funding of a land acquisition program include airport proprietors, other public agencies, and quasi-public agencies such as industrial development corporations.

Typically, property acquisition for noise mitigation is accomplished through voluntary programs. The purchasing agency notifies property owners in a given area when it is ready to negotiate the purchase of their land and homes. Property owners are assured that the airport will buy their land, assuming a fair price can be negotiated. Under a purely voluntary program, property owners are under no obligation to participate and may decide to remain in their homes. If the acquisition is part of a comprehensive redevelopment project, it may be necessary for the purchasing

agency to reserve the right to use its eminent domain authority.

If federal funds are used for property acquisition, the airport must comply with the Federal Uniform Relocation Assistance and Real Property Acquisition Act. (See 49 CFR, Part 24.) Under these regulations, the fair market value of the home is established through two professional appraisals. The homeowner is also entitled to reimbursement of moving expenses and compensation for other relocation expenses (such as closing costs and incidental expenses for a new home, and compensation for a higher interest rate on the new mortgage) up to a maximum of \$22,500. If the maximum relocation benefit, in addition to the sale price of the home, is not enough to assure the displaced person of acquiring comparable housing or, in any case, decent, safe, and sanitary housing, additional relocation payments may be available, subject to a case-by-case review.

In addition to clearing noise-sensitive land uses, property acquisition can also be used to promote the development of compatible uses. Land parcels can be bought, consolidated, re-zoned, and sold or leased for redevelopment of compatible industrial, commercial, and recreational uses. Redevelopment of noise-impacted property can ensure land use compatibility near the airport while promoting economic development. This can involve a full urban renewal or community redevelopment program or the simple sale of land for private development. A large-scale redevelopment program is potentially very complicated and would be

successful only if a variety of local conditions are favorable.

- **EVALUATION**

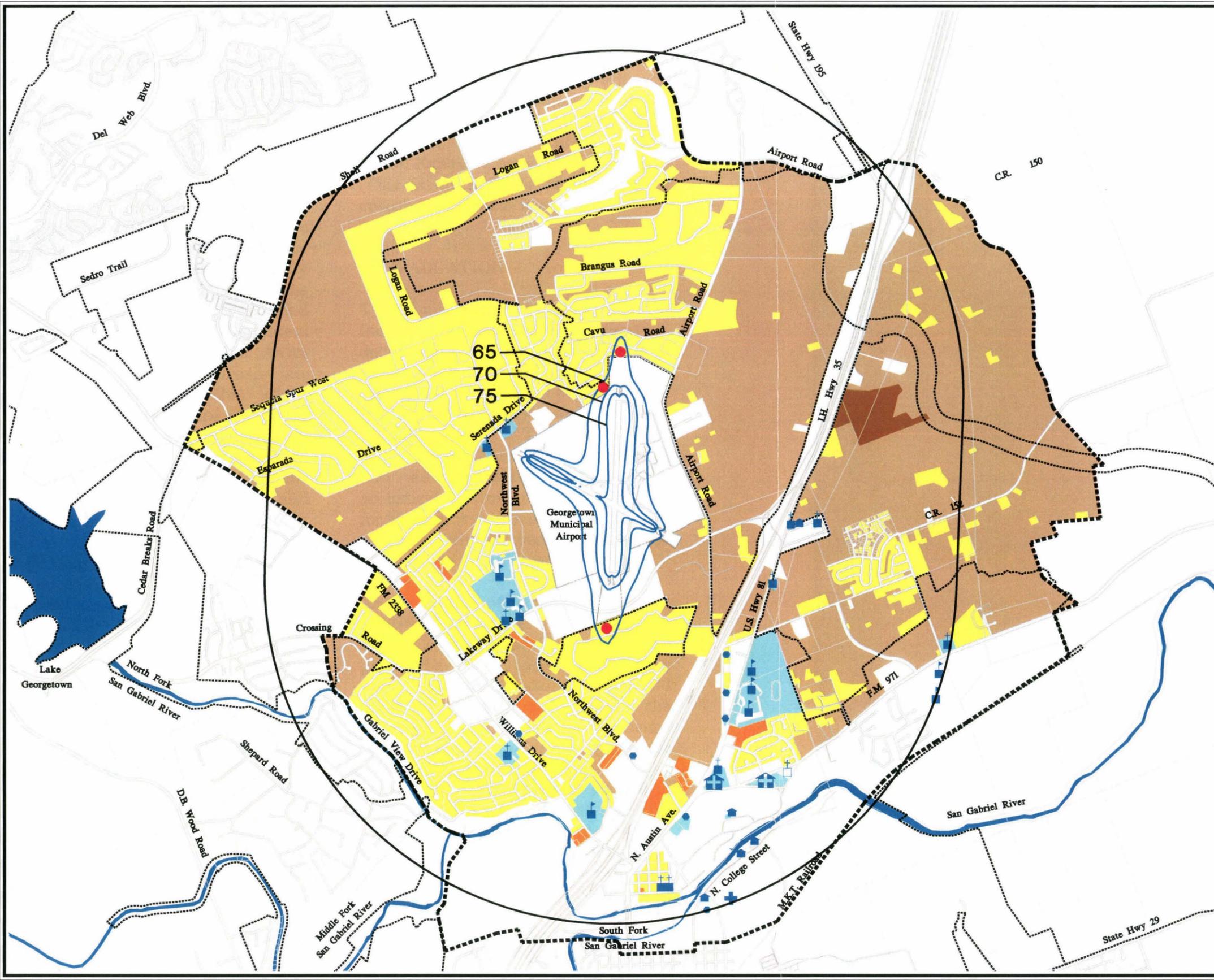
As depicted on **Exhibit 6H**, only 27 homes are contained within the 2008 65 DNL noise contour. These homes are part of an established, cohesive neighborhood. Should these homes be purchased, they essentially would be removed which would not only disrupt an established neighborhood, but could potentially also expose remaining residences to increased ground noise.

- **CONCLUSION**

This technique does not deserve further consideration. Implementation of this technique would not only disrupt an established neighborhood, it could also potentially increase the ground noise impacts on the remaining residences in the area.

### **Acoustical Treatment**

Dwellings and other noise-sensitive buildings can be acoustically-treated, or sound-insulated, to reduce interior noise levels. Sound insulation typically can improve the outdoor-to-indoor noise level reduction of a structure by five to ten decibels. Sound insulation may involve thermal insulation and weatherproofing, the baffling of vents and mail slots, the installation of solid-core wood doors or foam-core steel doors, the installation of acoustical windows with special noise attenuation characteristics, the installation of new



### LEGEND

- Detailed Land Use Study Area
- Municipal Boundary
- Airport Property
- Horizontal Surface/Airport Planning Area
- 2008 DNL Noise Exposure Contour, Significant Effect
- Sound Insulation Areas
- Residential Low Density
- Residential Medium Density
- Recreational Vehicle Park
- Noise Sensitive Institutions
- Proposed Development Areas
- School
- Day Care Facility
- Community Center
- Residential Care Facility
- Place of Worship
- Cemetery

Source: Aerial Photography, dated April 4, 2001  
 Corrigan Consulting, Inc.  
 City of Georgetown Century Plan, updated 1996.  
 City of Georgetown Zoning Ordinance, April 26, 2000.  
 Coffman Associates Analysis.

NORTH  
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 SCALE IN FEET

**GEORGETOWN MUNICIPAL AIRPORT**

interior walls along existing walls, and the installation and use of year-round air conditioning and ventilation systems.

Fresh air circulation systems or air conditioning systems are necessary if the full benefits of sound insulation are to be realized. This enables windows and doors to be closed throughout the year. If air conditioning is to be fully effective for sound insulation, the residents must accept the costs and inconvenience of operating the system until the heating season begins. As an alternative, a forced fresh air circulation system, capable of a complete change of air twice every hour and a 20 percent change of new fresh air every hour, equipped with acoustical baffling or other treatment of the air inlets, would permit closed doors and windows when neither air conditioning nor heating are required. Most forced air heating systems can be adapted to this purpose. The FAA requires that property owners and residents be notified of the utility and maintenance costs associated with any heating or air conditioning system installed as part of a sound insulation program.

The FAA will assist in funding sound insulation of noise-sensitive buildings within the 65 DNL contour if the buildings cannot achieve an outdoor-to-indoor noise level reduction of 20 decibels or more. (Within the 70 DNL contour, the noise level reduction threshold increases to 25 decibels, and within the 75 DNL contour to 30 decibels.) Sound insulation projects must be designed to achieve at least a five decibel improvement in noise level reduction. The target is to reduce

interior noise levels to 45 DNL or less. Sometimes, a supplementary criterion is used in actual project design to ensure that interior noise levels from individual overflights not exceed a Sound Exposure Level (SEL) of 65 dB. (This is an estimate of the average speech interference level.)

#### • EVALUATION

Typical acoustical treatment measures include the installation of acoustical doors and windows, insulation, and forced air heating and air conditioning systems. The estimated average cost of treating these homes is approximately \$20,000 each. This covers the acoustical treatment cost, engineering, and administrative costs. The acoustical treatment costs are eligible for 95 percent state and federal funding. The remaining 5 percent is covered through the airport's capital budget.

As a condition of participation in the acoustical treatment program, the airport could require homeowners to grant an avigation easement. This is a very common feature of sound insulation programs around the country. In exchange for the home improvements, the property owner conveys an easement granting the airport the right to operate aircraft in the area, with all attendant effects of aircraft operations, without being sued by the grantor. Since the easement runs with the land, it also helps to serve as a fair disclosure notice to future buyers of the home.

As shown on **Exhibit 6H**, 27 homes are contained within the projected 2008, 65

DNL noise contour. It has already been determined that acquiring these homes is not prudent nor feasible; therefore, sound insulation would be a suitable means of lessening the noise impacts on the residents of these homes. Noise-sensitive uses within the 65 DNL contour and built after the FAA's acceptance of the Noise Exposure Maps (NEM) in November 2003 are not eligible for federal funding for mitigation. However, for the purposes of estimation, the total of 27 eligible dwellings, based solely on their location within the 2008, 65 DNL noise contour, was used. At an average cost of \$20,000 per unit, the total acoustical treatment cost would be \$540,000. Approximately \$513,000 would be eligible for federal funding through the noise set-aside of the AIP. The remaining \$27,000 would be covered through the airport's operating budget.

- **CONCLUSION**

The City of Georgetown should consider sound insulation within the 65 DNL noise contour as a means of reducing the impact of noise on residences.

### **Purchase of Noise and Avigation Easements**

Noise and avigation easements give an airport the right to direct aircraft over property, creating related annoyances, without the threat of a lawsuit. These easements run with the land and serve as a limited means of notifying prospective property owners of the impact of airport noise. The purchase of noise and avigation easements within

the 65 DNL is eligible for federal funding assistance through the noise set-aside of the Airport Improvement Program. Purchase of noise and avigation easements over existing homes may be appropriate if noise is so disturbing that it substantially interferes with the full enjoyment of the property. It may also be appropriate where, as part of a noise abatement or airport development program, noise is introduced to areas which formerly were not impacted.

The advantages of purchasing noise and avigation easements include some legal protection for the airport and limited fulfillment of fair disclosure objectives. An additional benefit is that they compensate airport neighbors who have been heavily impacted by noise and who may have lost some of the potential enjoyment of their property.

A disadvantage of an avigation easement purchase program is its potentially high cost. There is also a risk that despite the expense of purchasing the easements, the airport may become the target of complaints, controversy, political pressure, and even lawsuits, if the noise environment or the attitude of easement grantors changes substantially. Of course, the purchase of a noise and avigation easement does not mitigate noise, it merely compensates people for the inconvenience caused by noise.

- **EVALUATION**

The City of Georgetown currently requires that avigation easements be placed on all new development within

two miles of the airport, which is essentially the boundary of the F.A.R. Part 77 horizontal surface. The purpose of this easement is to regulate the height of structures based on the F.A.R. Part 77 regulations. Consideration should be given to changing this easement to a noise and aviation easement in order to make developers aware of not only the height restrictions but also the noise produced by the airport.

The ability of the City of Georgetown of acquiring aviation easements as a condition of development and securing easements as a condition of participation in the sound insulation program reduces the need for a separate aviation easement purchase program.

- **CONCLUSION**

It would be better for the city to continue obtaining aviation easements as a condition of development within the airport planning area, and securing easements as a condition of participation in the sound insulation program, than to develop a separate aviation easement purchase program.

### **Purchase Assurance**

Purchase assurance programs are intended to assure homeowners in noise-impacted areas that they will be able to sell their property at fair market value. The airport proprietor would acquire the property if the homeowner was unable to sell it on the open market. The airport would then sell the home and retain an aviation easement

after making sound insulation or other property improvements.

Purchase assurance programs are most appropriate where there is a widespread concern that homeowners would have difficulty selling homes because of noise intrusion. They are appropriate where the noise levels are not so severe as to make the neighborhood unlivable, or where it is impractical or otherwise inappropriate to acquire and clear neighborhoods.

A purchase assurance program allows the airport to address concerns of people who are very annoyed by aircraft noise and who desire to leave the neighborhood without suffering financial loss. It can be fairly economical as, in many areas, property values do not experience declines because of aircraft noise. Thus, it may be possible for the airport to sell the home at or near the cost of purchase.

Purchase assurance programs can be fairly complex and time-consuming to administer. They also open up the risk that the airport will have to become a property manager or landlord if market conditions make it difficult to sell homes. The program should be carefully staged to prevent a glut of applicants at any one time. Otherwise, an adverse reaction in the larger real estate market could be caused.

- **EVALUATION**

A purchase assurance program has many disadvantages and would draw funding away from the proposed sound

insulation program. The disadvantages include:

- The program would require considerable administrative support.
- The airport would have to pay closing costs when purchasing and reselling the home, a relatively unproductive use of its mitigation funds.
- The property purchased by the airport would be removed from the tax rolls during the time it takes to acoustically treat the home, remedy code deficiencies, and sell the home.
- A considerable amount of the airport's mitigation funds would be tied up between the time the airport buys and sells the home. This could cause cash flow problems which would reduce the amount of money available for acoustical treatment over any given period of time. This could also result in other incidental costs such as loss of interest while the money is tied up in the property.
- The airport would be responsible for the maintenance and security of the property while the property is in the airport's possession.
- As the property owner, the airport would be liable for the cost of all code deficiency repairs.
- Only 27 homes would be eligible and it would be more cost-effective to sound-insulate.

## • CONCLUSION

Purchase assurance would add to the administrative costs of the mitigation program and would impede cash flow by tying up relatively large amounts of money after acquisition and before resale. Therefore, purchase assurance should not be considered.

## Sales Assistance

With a sales assistance program, the airport would offer to supplement any bona fide purchase offer up to an amount equal to fair market value. These programs are typically structured very much like purchase assurance programs except that the airport never takes title to the property. The airport guarantees the property owner of receiving the appraised value, or some increment thereof, regardless of the final sales price that is negotiated with a buyer. In order to prevent collusion between buyer and seller, to the detriment of the airport, the airport must approve the listing price for the home and any downward adjustments of that price. In return for participation in the program, the airport could require the property owners to give the airport an avigation easement. In other respects, the program guidelines would be similar to those described above for purchase assurance programs.

## • EVALUATION AND CONCLUSION

Similar to the purchase assistance program, sales assistance programs are

difficult to administer and tie up large amounts of mitigation funding for extended periods of time.

- **CONCLUSION**

As with the purchase assistance program, sales assurance would add to the administrative costs of the mitigation program and would impede cash flow by tying up relatively large amounts of money. Therefore, sales assurance should not be considered.

### **Development Rights Acquisition**

The ownership of land involves the ownership of a bundle of rights to the use of that land and to develop it to the extent permitted by government regulations such as zoning, health and safety laws, and environmental laws. A property owner can sell some of these rights while still retaining title to the land. For example, a property owner surrenders some of the rights to their property when he or she grants someone an easement or sells the mineral rights to the property. One of the rights a property owner can sell is the right to develop the property for urban uses.

A different legal instrument, which has substantially the same effect as the purchase of development rights, it is a restrictive land use easement. Purchase of such an easement can extinguish the rights to develop the property, rather than simply transfer them to another owner. This distinction can be important when the intent is to totally prevent the possibility of future

development. (Theoretically, one might be able to argue that development rights that have been purchased from a property owner by the government could conceivably be sold back to that property owner at some point in the future.)

The purchase of development rights or restrictive land use easements is appropriate when there is insufficient legal justification to use zoning to prevent incompatible uses or where there is strong local opposition to the use of zoning. Development rights purchase can also be an alternative to fee simple acquisition. This is especially appropriate where the land is undeveloped and being farmed or used for private recreation.

The advantage of purchasing development rights is that complete protection from incompatible development can be assured, and the property owners can receive compensation for any perceived loss. In addition, the property can be kept in private ownership, in productive use, and on the tax rolls while protecting the airport from incompatible development.

The main disadvantage is the potentially high cost of the development rights, in return for which the buyer receives only a very limited interest in the property. In urbanizing areas where property owners have a reasonable basis for development expectations, development rights can cost nearly as much as the full fee title. In rural areas, on the other hand, development rights can be an economical alternative to fee simple acquisition.

- EVALUATION

Large parcels of land to the east of the airport, depicted on **Exhibit 6J**, between Airport Road and Interstate 35 would be the most likely candidates for the purchase of development rights. As discussed in previous sections, these parcels of land receive a large number of overflights due to the traffic pattern for Runway 18-36. After reviewing the price of lots in the area, it was determined that a standard one-half acre residential lot would sell for approximately \$25,000. For the purpose of this cost estimate, the development rights of that lot are assumed to be 50 percent of the selling price. The city's intensity map would allow approximately two residential lots per acre. The total acreage of the parcels under consideration is approximately 906 acres, minus 30 percent for street and other utility development, leaving 634 acres or 1,268 potential residential lots. At a development right price of \$12,500 per lot, the development rights would cost approximately \$15.85 million. Since these parcels are located outside the 65

DNL noise contour, funding for this alternative would be the responsibility of the City of Georgetown. No state or federal funding would most likely be available.

- CONCLUSION

This alternative would solve the potential problems of possible residential development east of the airport; however, the cost of the alternative may be cost-prohibitive as federal and state funding for the alternative are not likely.

### ***PRELIMINARY LAND USE ALTERNATIVES***

**Table 6B** presents the preliminary list of land use management alternatives which deserve consideration. These are to be reviewed by the PAC, airport management, and the public. Refinements to these preliminary measures may be necessary before the final plan is developed.



**TABLE 6B**  
**Land Use Management Alternatives Deserving Further Consideration**  
**Georgetown Municipal Airport**

<i>Description</i>	<i>Cost</i>	<i>Implementing Agency</i>
1. <i>General Plan Amendment</i> : Enact guidelines specifying noise compatibility criteria for the review of development projects within the airport planning area.	Administrative	City of Georgetown
2. <i>Zoning Amendment</i> : Amend zoning map to show suitable zoning classification for airport property.	Administrative	City of Georgetown
3. <i>Industrial Zone</i> : Create an industrial zone within the unincorporated areas to the east of the airport as these areas cannot be zoned by Williamson County.	Administrative	City of Georgetown
4. <i>Airport Zoning Ordinance Amendment</i> : Amend the existing airport zoning ordinance to incorporate compatible land use zoning regulations.	Administrative	Georgetown-Williamson County Airport Zoning Board
5. <i>Amend Subdivision Regulations</i> : Amend existing aviation easement contained within the subdivision regulations to incorporate a provision for noise produced by the airport.	Administrative	City of Georgetown
6. <i>Amend Building Codes</i> : Amend current building code to incorporate prescriptive noise standards.	Administrative	City of Georgetown
7. <i>Fair Disclosure</i> : Enact fair disclosure within the airport planning area.	Administrative	City of Georgetown
8. <i>Acoustical Treatment</i> : Acoustically treat homes within the 2008 65 DNL noise contour.	\$540,000	City of Georgetown