The acquisition of these homes is planned for in the long term. If acquired, the number of noise-impacted homes would be reduced near the airport.

**FAIR DISCLOSURE REGULATIONS**

Fair disclosure regulations, also known as real estate disclosures, are intended to ensure that prospective property buyers are informed that the property is or will be exposed to potentially disruptive aircraft noise. At the most formal level, fair disclosure can be implemented through regulations requiring the seller and agent to provide a notice of aircraft exposure on the real estate listing sheet and at the time a sales contract is executed. Additionally, any easements should be revealed at the time of closing. Fair disclosure regulations can place a high responsibility on real estate agents and lenders to disclose this information if legislation is not properly drafted. To ensure effectiveness, the disclosure regulations should clearly define the airport noise levels or overlay districts impacting the property and direct buyers to airport officials for more information.

**NOISE EXPOSURE CONTOURS**

The standard methodology for analyzing noise conditions at airports involves the use of a computer simulation model. The FAA has approved the Airport Environmental Design Tool (AEDT) for use in environmental and planning analyses. The purpose of the noise model is to produce noise exposure contours that are overlain on a map of the airport and vicinity to graphically represent aircraft noise conditions. When compared to land use, zoning, and general plan maps, the noise exposure contours may be used to identify areas that are currently, or have the potential to be, exposed to aircraft noise.

To achieve an accurate representation of an airport’s noise conditions, the AEDT uses a combination of industry standard information and user-supplied inputs specific to the airport. The software provides noise characteristics, standard flight profiles, and manufacturer supplied flight procedures for aircraft within the U.S. civil and military fleets, including those which commonly operate at Georgetown Municipal Airport. As each aircraft has unique design and operating characteristics (number and type of engines, weight, and thrust levels), each aircraft emits different noise levels. The most common way to spatially represent the noise levels emitted by an aircraft is a noise exposure contour.

Airport-specific information, including runway configuration, flight paths, aircraft fleet mix, runway use distribution, local terrain and elevation, average temperature, and numbers of daytime and nighttime operations, are also used as modeling inputs.

Based on the assumptions provided by the user, the AEDT calculates average 24-hour aircraft sound exposure within a grid covering the airport and surrounding areas. The grid values, represented with the day-night noise level metric or DNL, at each intersection point on the grid, represent a noise level for that geographic location. To create the noise contours, an isoline, similar to those on a topographic map, is drawn which connect points of the same DNL noise value. In the same way that a topographic contour represents the same elevation, the noise contour identifies areas of equal noise exposure.
DNL is the metric currently accepted by the FAA, EPA, and HUD as an appropriate measure of cumulative noise exposure. These three agencies have each identified the 65 DNL noise contour as the threshold of incompatibility.

Noise exposure contours were prepared for the airport for a baseline condition (2016) and a long-range condition (2036) based on the operational forecasts presented in Chapter Two. The resulting contours are shown on Exhibit 5F and discussed in depth in Table 5D, which explains that the existing and future condition 65 and 70 DNL noise contours extend off airport property in select areas.

NON-COMPATIBLE DEVELOPMENT ANALYSIS

Areas with the potential for non-compatible development, when compared to the noise exposure contours and Part 77 approach surfaces, have been evaluated. This was done by evaluating the locally adopted zoning designations and future land use plan for undeveloped parcels encompassed within the four approach zones to determine if noise-sensitive land uses could be developed on these areas. An analysis of land uses within the noise contours is also discussed.

As previously discussed in the Environmental Overview (Table 5D), the 65 DNL noise contour is the threshold of incompatibility for noise-sensitive land uses, such as residential land uses without acoustic treatment, mobile homes, transient lodging, schools, religious entities, medical buildings, and public facilities. Exhibits 5H and 5J depict existing and future noise exposure contours on future land uses and zoning, respectively.

As seen in the left-hand panel of Exhibit 5H, and as discussed previously in the Environmental Overview, the airport is surrounded by noise-sensitive land uses to the north, west, and south, which are primarily residential developments (see Exhibit 1P). Currently, the 65 and 70 DNL noise contours extend off airport property into a residential development northwest of Runway 18, impacting approximately 11 homes. The 65 DNL noise contour extends off airport property between the Runway 29 and 36 ends; however, this area is vacant and undeveloped.

The long-term (2036) noise contours, as shown in the right-hand panel on Exhibit 5H, extend off airport property in the same areas as the existing contours. The 65 and 70 DNL noise contours northwest of Runway end 18 are larger than the existing condition, likely due to the proposed runway extension, thus impacting approximately five homes in 70 DNL noise contours and 20 homes in the 65 DNL noise contour (approximately 25 homes total). The 65 DNL noise contour that extends off both sides of the Runway 36 end are larger than the existing condition.

The parcels within the Part 77 approach surfaces were evaluated to identify potential non-compatible development related to the height of structures. As depicted on Exhibit 5J, parcels within the Part 77 approach surfaces that are undeveloped, and thus have the potential to be developed incompatible in the future, are zoned: Local Commercial, Industrial, Residential Single Family, General Commercial, and Agriculture. Note that some areas have no zoning classification as they are in the City of Georgetown ETJ.
Existing Noise Condition

City of Georgetown ETJ

Future Noise Condition

City of Georgetown ETJ

LEGEND

- Airport Property Line
- Georgetown City Boundary
- Approach Surface
- Community Commercial
- Employment Center
- Mixed Use Neighborhood Center
- Special Area Mixed Use

- Low Density Residential
- High Density Residential
- Parks, Recreation, Open Space
- Future Airport Pavement
- Parcel Boundary
- Potential Future Acquisition

DNL - Day-Night Sound Level
ETJ - Extraterritorial Jurisdiction

Existing Noise Contours

Future Noise Contours

- 65 DNL
- 70 DNL
- 75 DNL

SOURCE: Coffman Associates analysis

Recommended Development Plan

5-51
**Legend**

- **Existing Noise Contours**
  - 65 DNL
  - 70 DNL
  - 75 DNL

- **Future Noise Contours**
  - 65 DNL
  - 70 DNL
  - 75 DNL

**Source:** Coffman Associates and City of Georgetown GIS

**Exhibit 5J**

**Land Use Analysis - Zoning**

**Recommended Development Plan**

**City of Georgetown ETJ**

**Future Noise Condition**

**Airport Property Line**

**Georgetown City Boundary**

**Approach Surface**

**Residential Single Family**

**Public Facility**

**Industrial**

**General Commercial**

**Local Commercial**

**Agriculture**

**No Zoning Classification**

**Potential Future Acquisition**

**DNL** - Day-Night Sound Level

**ETJ** - Extraterritorial Jurisdiction