

**2005-2020 LAND USE ANALYSIS:
TECHNICAL MEMO**

JOINING FORCES

NORTH TEXAS

2005-2020 LAND USE ANALYSIS

WHITE PAPER

INTRODUCTION

Communities surrounding Naval Air Station Joint Reserve Base Fort Worth (NAS JRB Fort Worth), along with the North Central Texas Council of Governments, came together in 2008 to complete a Joint Land Use Study (JLUS) to promote compatible growth in communities that neighbor the military installation and also to promote quality of life improvements outside the fence line.

Following the 2008 study, the communities that neighbor the base came together to protect the base's mission by:

- Forming the Regional Coordination Committee, which includes city and county elected officials and staff who meet quarterly with base leadership;
- Developing the Development Review Web Tool to address the compatibility of planned growth or land use changes; and
- Creating zoning overlays to encourage compatible growth in the base's safety zones and noise contours.

A second JLUS was completed in 2018 that updated recommendations for NAS JRB Fort Worth and also studied land use compatibility near Texas Military Department training facilities in North Texas. This study contained over 150 recommendations for the individual military installations as well as regional recommendations. Key recommendations have been implemented through grant funding provided by the Office of Local Defense Community Cooperation.

- Forming a Regional Coordination Committee Technical Subcommittee, consisting of city managers/administrators or other key local government staff to provide a more in-depth examination of compatible development issues;
- Encouraging additional zoning overlays to promote compatible growth;
- Implementing a strategic parcel acquisition and reuse program;
- Updating the Land Use Analysis initially performed in the 2018 JLUS project;
- Creating and distributing a Welcome Packet to new and existing residents living near NAS JRB Fort Worth to better understand the impacts and importance of compatible development;
- Updating the Development Review Web Tool to make it easier to use; and
- Documenting compatibility actions undertaken by communities near NAS JRB Fort Worth.

The Department of Defense's Air Installation Compatible Use Zones (AICUZ) program recommends land uses that will prevent noise, safety, or obstruction conflicts with communities that neighbor military

JOINING FORCES

NORTH TEXAS

“THE CITY OF FORT WORTH HAS GROWN BY 31% FROM 2010 TO 2022, ACCORDING TO THE U.S. CENSUS BUREAU'S AMERICAN COMMUNITY SURVEY 5-YEAR ESTIMATES.”

air installations. These efforts also aim to protect installations from incompatible growth that could impede the military mission¹.

BACKGROUND

Much of the development in the AICUZ boundaries predates noise control legislation and military guidance on compatible growth, which date to the 1970s² (Figures 1-2). The populations of the cities that neighbor NAS JRB Fort Worth have continued to grow since the completion of the 2008 JLUS. The City of Fort Worth has grown by 31 percent from 2010 to 2022³, according to the U.S. Census Bureau's American Community Survey 5-Year Estimates. Some of this growth resulted from annexation in areas not impacted by the installation. The combined growth of the other cities neighboring the installation was 12 percent from 2010 to 2022. Land in the cities continues to be developed or redeveloped. Data on development dates was acquired from Tarrant Appraisal District. Figure 3 and Figure 4⁴ represent development or redevelopment in the 2016-2020 time period, the period since the last Land Use Analysis contained in the 2018 Joining Forces report. Figure 5 and Figure 6 represent development or redevelopment during the 2008-2020 time period, the entire time the communities surrounding NAS JRB Fort Worth have been focused on compatible development. Table 1 shows a summary of the number of changed parcels for both the most recent 5-year period and the overall study time period broken out by combined noise and safety zones.

¹ Department of Defense Instruction Number 4165.57, December 13, 2021 <http://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/616557p.pdf>

² Department of Defense Instruction 4165.57 of 8 Nov 1977 and the Noise Control Act of 1972, 42 U.S.C. 4901 {et Seq.}

³ 2010 was used because the American Community Survey does not provide data from 2008 that is comparable to 2022, the most recent year for which data is available.

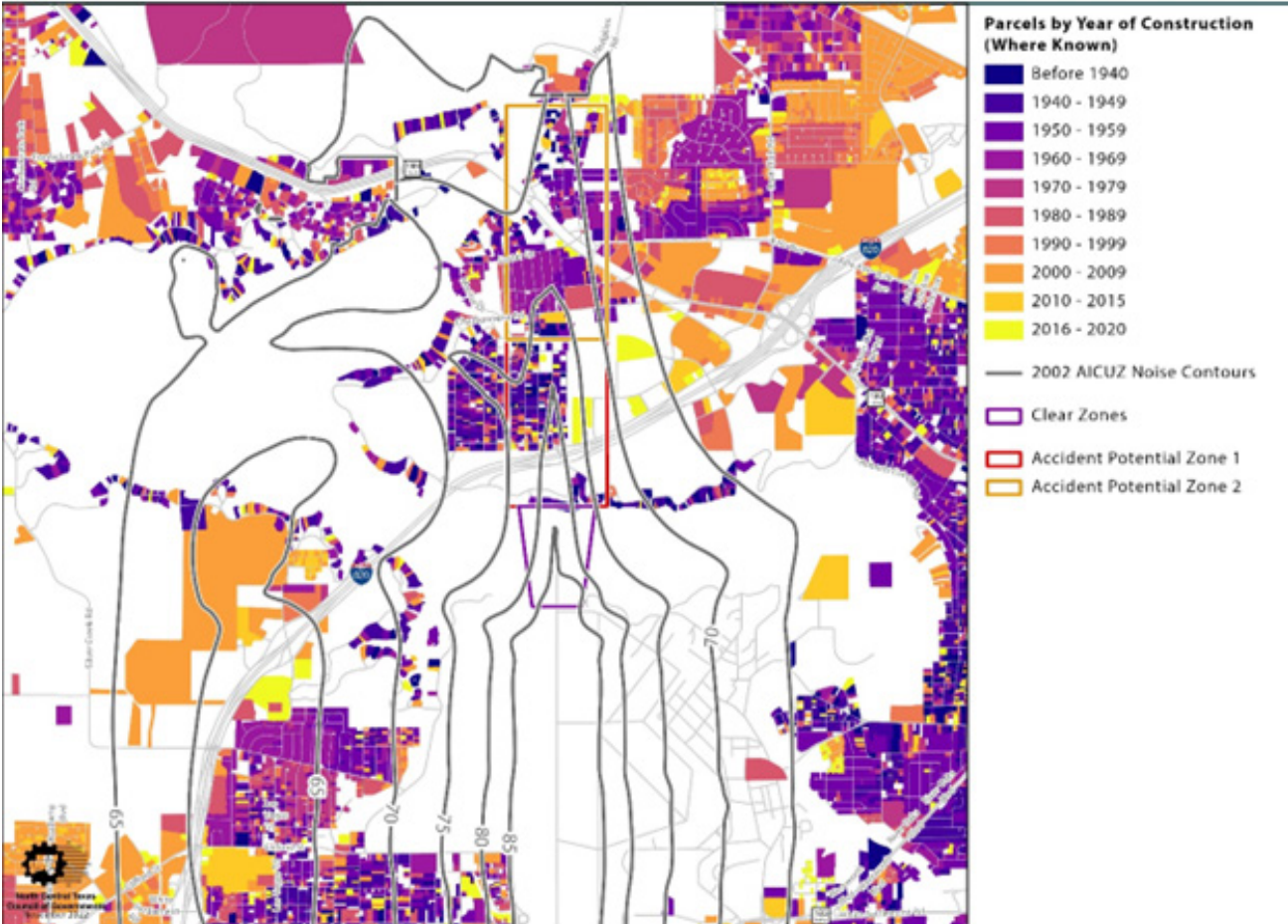
⁴ Parcel data in Figures 1-6 was acquired from Tarrant Appraisal District. This data is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. They do not represent an on-the-ground survey and represent only the approximate relative location of property boundaries.

JOINING FORCES

NORTH TEXAS

Figure 1

Development by Decade (North)

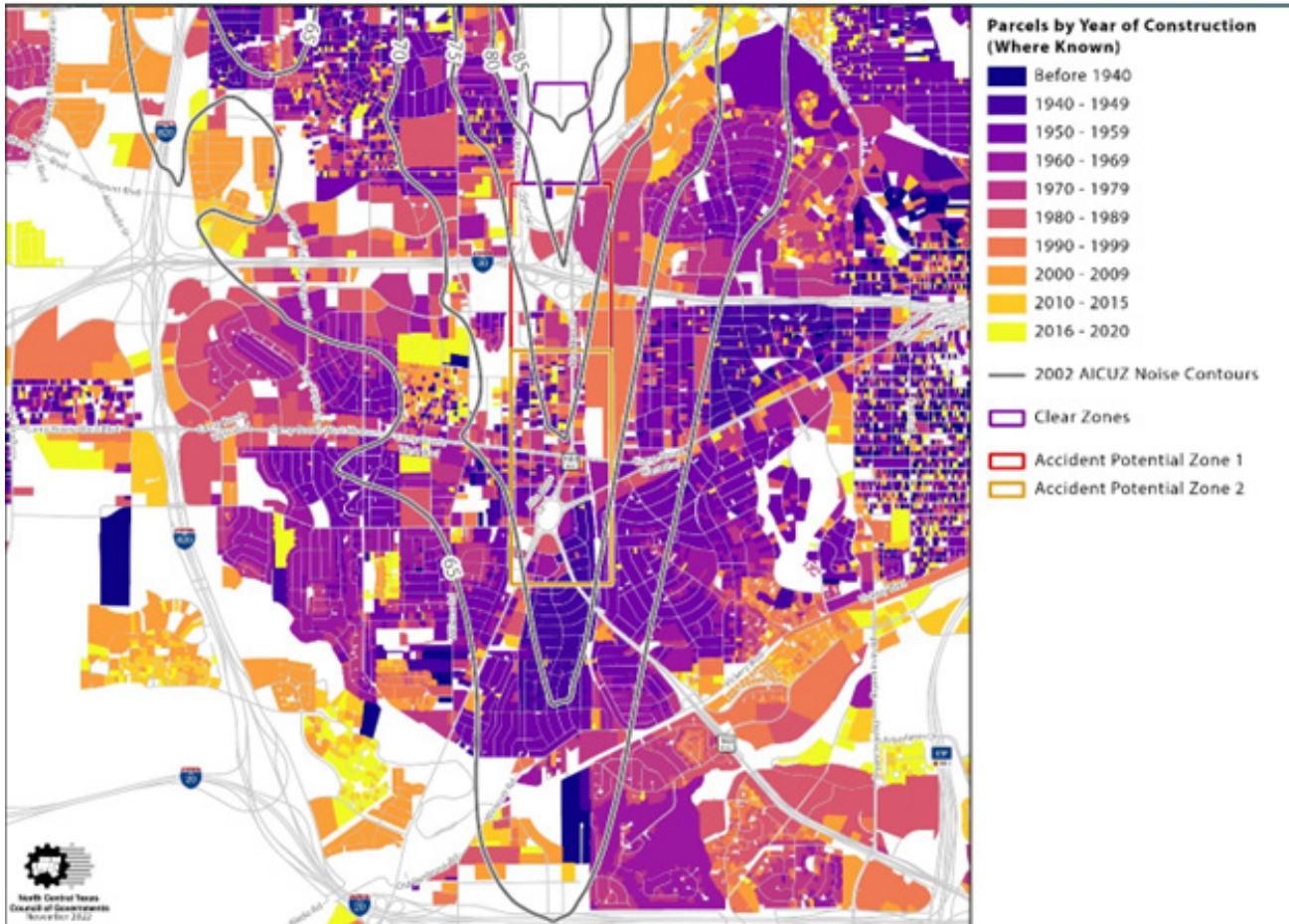


JOINING FORCES

NORTH TEXAS

Figure 2

Development by Decade (South)

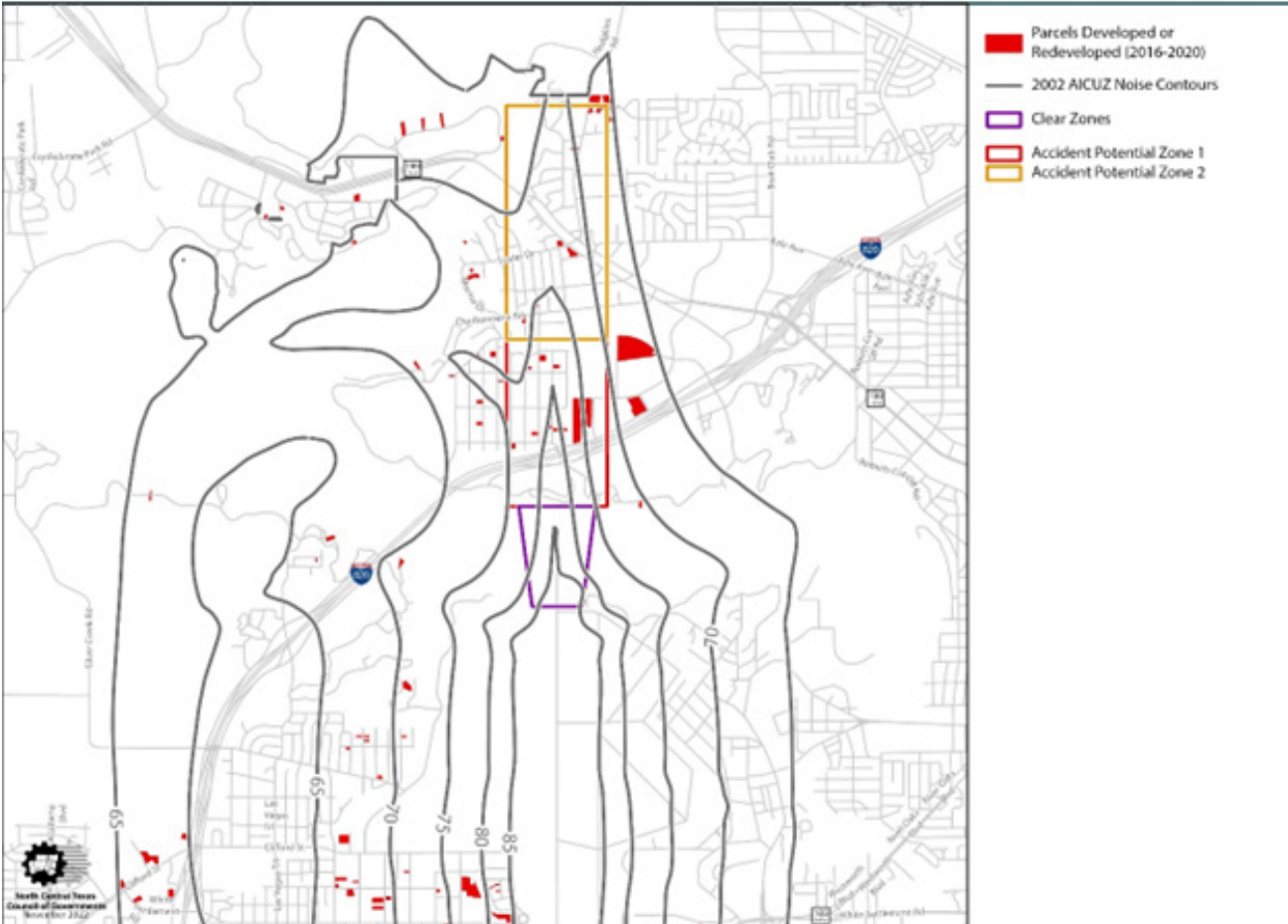


JOINING FORCES

NORTH TEXAS

Figure 3

Parcels Developed or Redeveloped 2016-2020 (North)

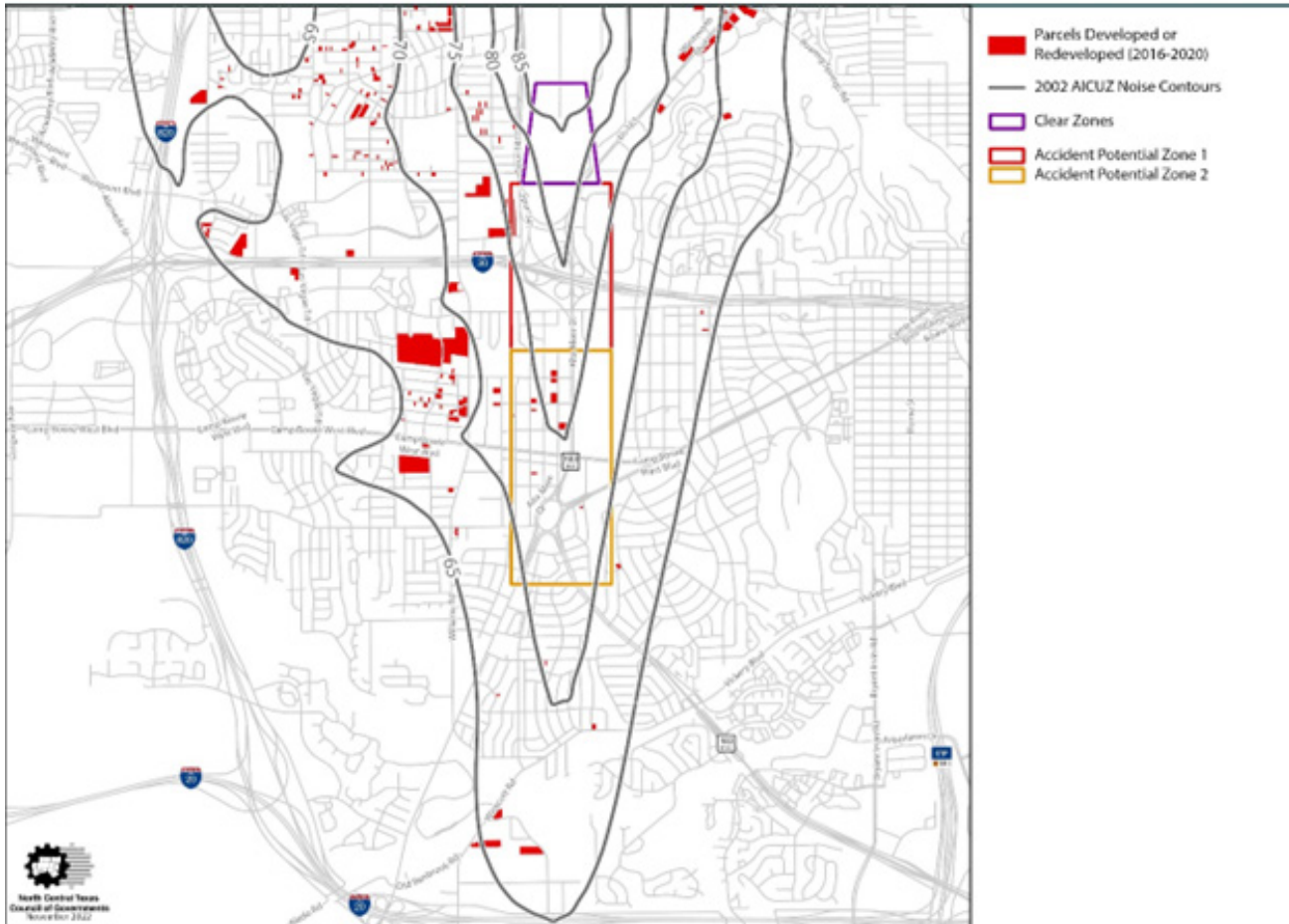


JOINING FORCES

NORTH TEXAS

Figure 4

Parcels Developed or Redeveloped 2016-2020 (South)

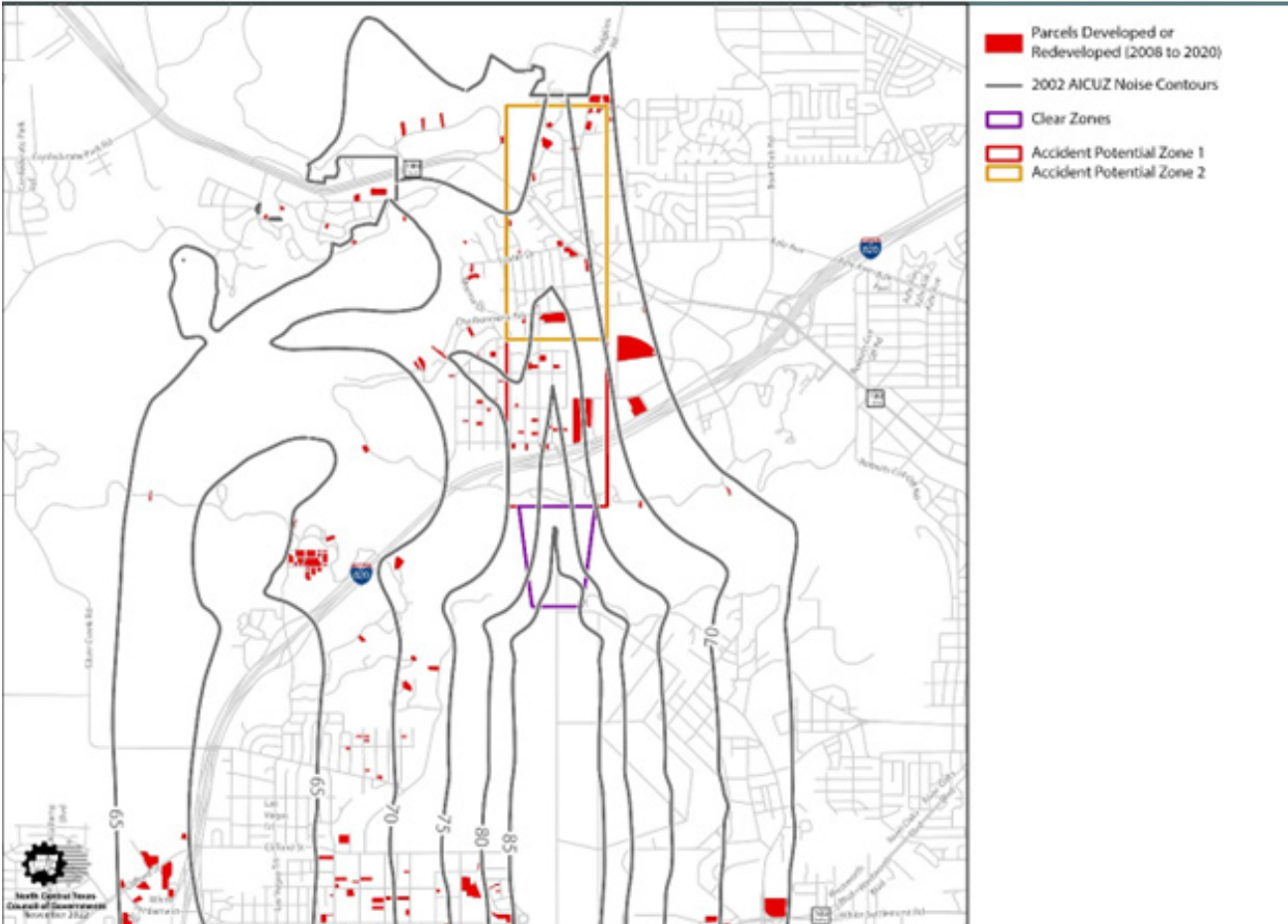


JOINING FORCES

NORTH TEXAS

Figure 5

Parcels Developed or Redeveloped 2008-2020 (North)

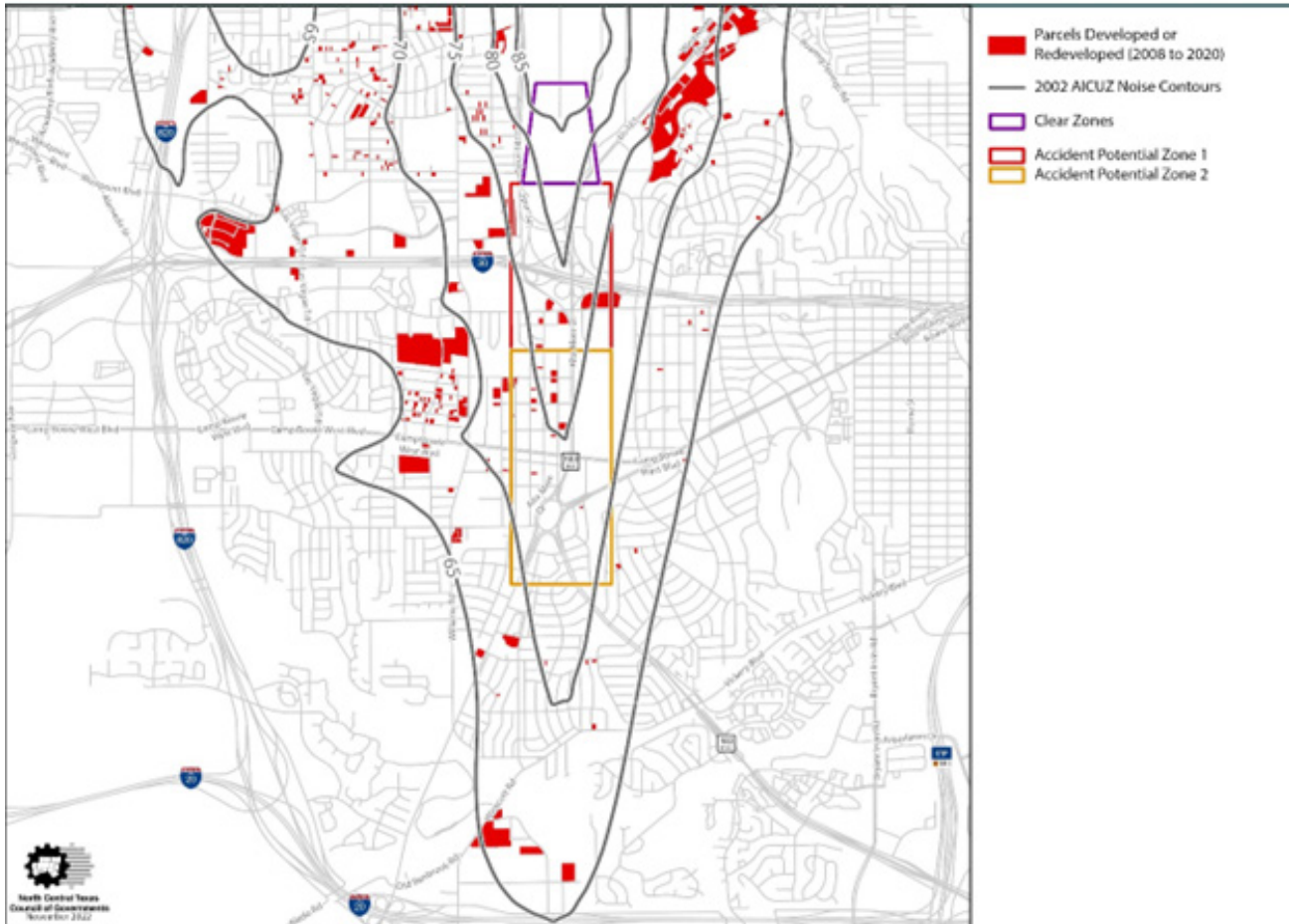


JOINING FORCES

NORTH TEXAS

Figure 6

Parcels Developed or Redeveloped 2008-2020 (South)



JOINING FORCES

NORTH TEXAS

Table 1

Combined Land Use Area	Number of Changed Parcels 2015-2020	Number of Changed Parcels 2005-2020	Total Parcels
Outside Safety / 65dB	838	1,367	7,691
APZ II / 65dB	15	18	166
Outside Safety / 70dB	221	436	2,544
APZ II / 70dB	136	136	1,044
APZ I / 70dB	7	8	92
Outside Safety / 75dB	55	79	457
APZ II / 75dB	49	43	161
APZ I / 75dB	68	77	331
CZ / 75 dB	0	0	3
Outside Safety / 80dB	44	37	131
APZ I / 80dB	9	8	37
CZ / 80dB	0	0	2
Outside Safety / 85dB	1	1	1

JOINING FORCES

NORTH TEXAS

CITY ORDINANCES AND OTHER COMPATIBILITY EFFORTS

The 2008 JLUS recommended cities adopt ordinances to create an NAS JRB Fort Worth overlay district to manage growth and guide land use. Three cities that neighbor the installation developed such ordinances in subsequent years, as shown in **Figures 7-8**.

The City of Fort Worth includes land that falls in all of the safety zones and noise contours. In 2013, the city adopted an ordinance that added airport/airfield overlay zones and compatible use zones restrictions for incompatible uses within clear zones and accident potential zones for all aviation facilities in the city, including NAS JRB Fort Worth.

In 2014, the City of Fort Worth adopted a revision to the 2013 ordinance that addressed NAS Fort Worth, JRB specifically. The updated ordinance addresses siting of communications facilities, as well as outdoor lighting and glare.

The City of Fort Worth also adopted an ordinance in 2016 that amended Appendix L of the city's Building Code requiring sound insulation for noise sensitive users near airports. Details on building materials for windows, walls, doors, and roof/ceiling are addressed. The Building Code requirements cover all portions of the city that fall within AICUZ noise contours.

The City of Benbrook includes land that falls in the 65-69 decibel noise contour. In 2013, the city adopted an ordinance that created an overlay district to provide land uses that are compatible with aircraft operations at NAS JRB Fort Worth. The ordinance permits new educational, religious, and cultural land uses within the noise contour only if sound attenuation is used that reduces inside sound levels by 25 decibels. The ordinance prohibits new development of one-family, two-family, and multi-family dwellings; the construction or reconstruction of these residential land uses is only allowed if the dwellings were constructed, occupied, or platted by the date of the ordinance and sound attenuation is used to reduce inside sound levels by 30 decibels. In 2023, the city added additional land uses such as health care facilities and daycares to the requirement to use sound attenuation within the 65-69 decibel noise contour.

In 2019, the City of Lake Worth adopted an ordinance that added a Naval Air Station overlay to encourage compatible development within the portion of APZ I that is within the city limits.

The City of White Settlement include a NAS JRB Fort Worth overlay in its 2040 Comprehensive Plan and has since rezoned parcels within APZ I to Industrial zoning to be more compatible with land use recommendations.

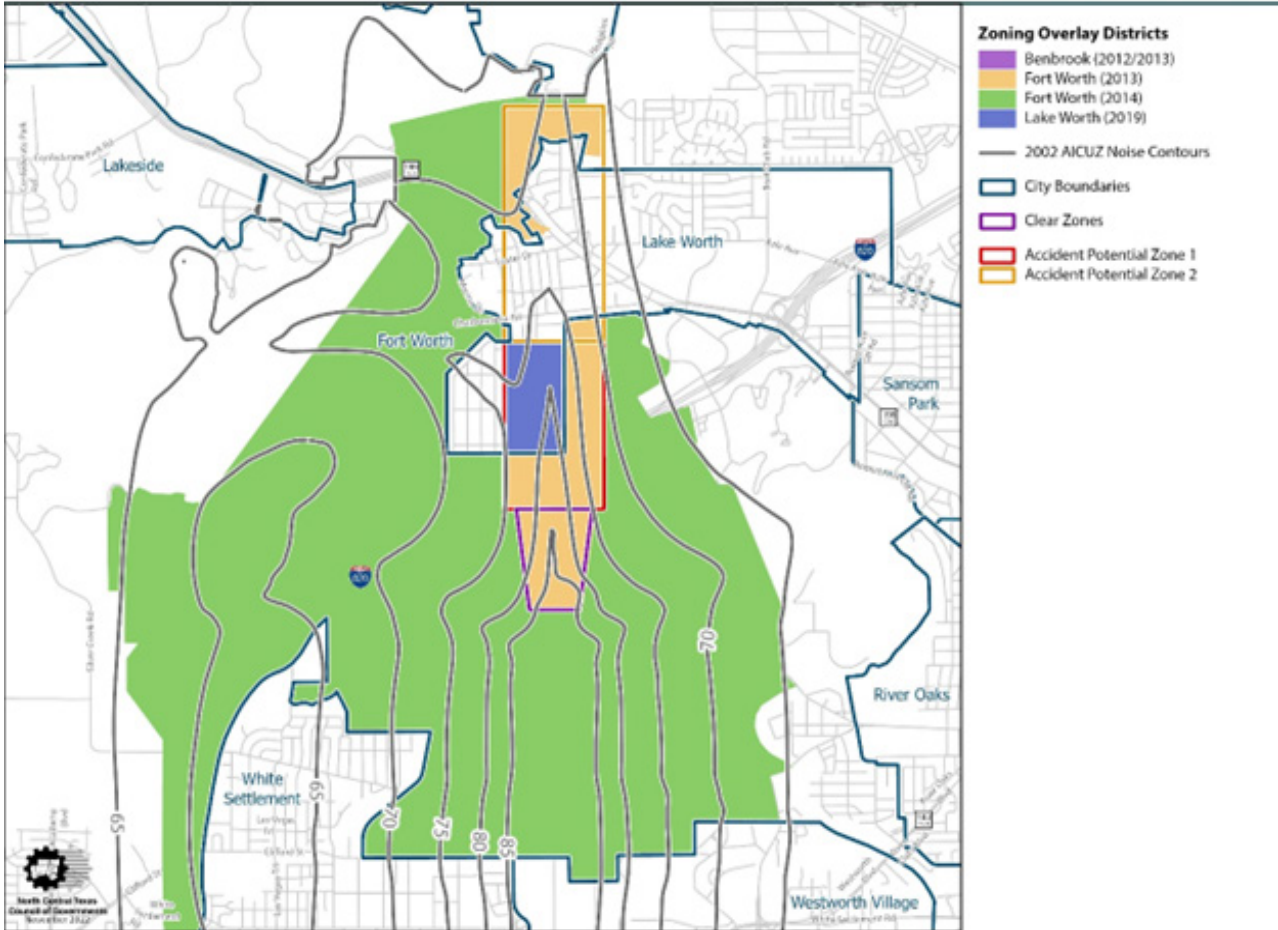
Another recommendation of the 2008 JLUS was the formation of a regional committee to monitor future land use impacts. The Naval Air Station Fort Worth Regional Coordination Committee was formed and meets at least quarterly; the committee created an online Development Review Tool to generate discussion on the compatibility of potential land uses changes in the AICUZ. The tool was significantly updated in 2023 and a separate white paper has been developed that discusses the new tool.

JOINING FORCES

NORTH TEXAS

Figure 7

Zoning Overlay Districts (North)

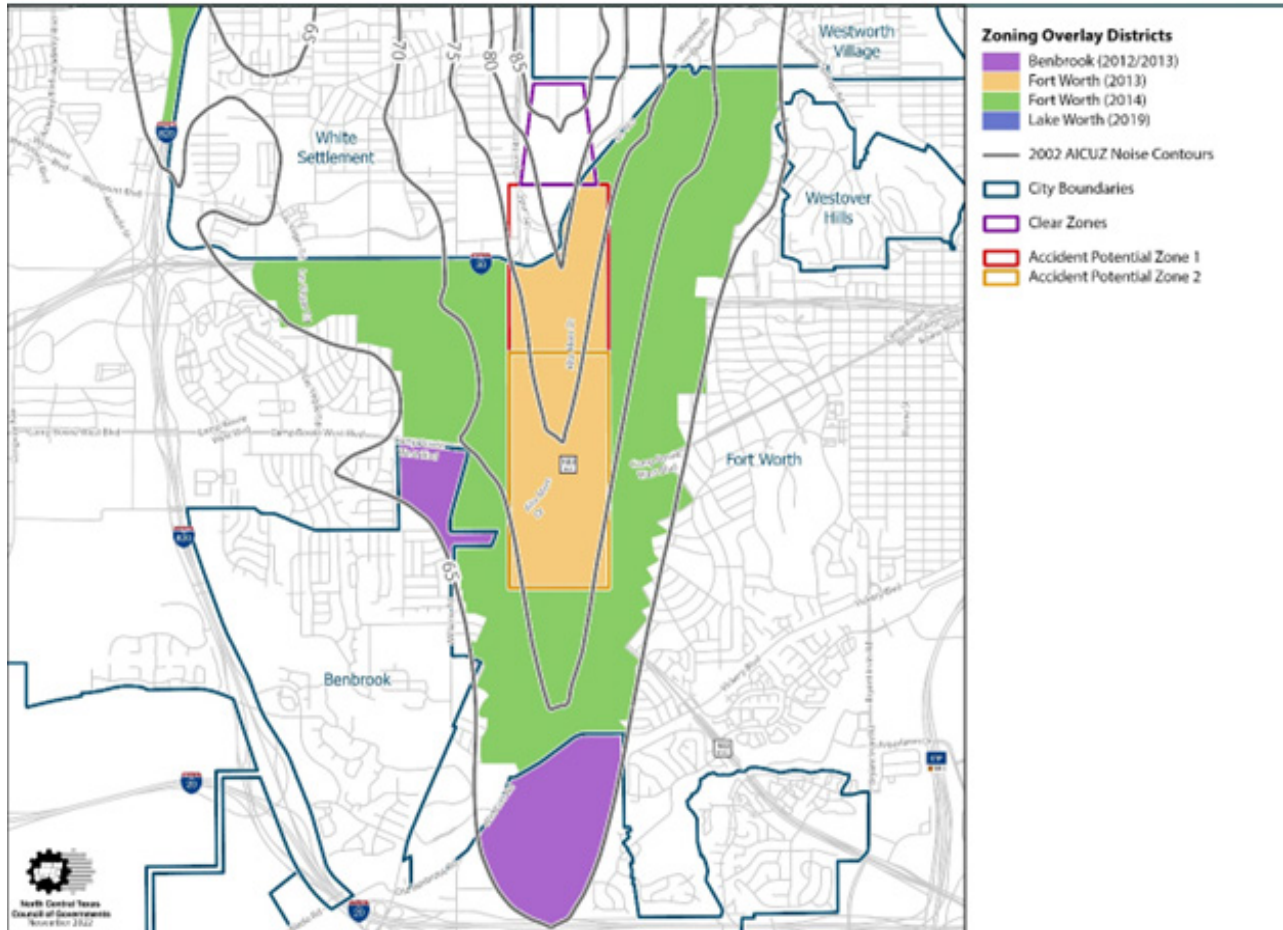


JOINING FORCES

NORTH TEXAS

Figure 8

Zoning Overlay Districts (South)



JOINING FORCES

NORTH TEXAS



CURRENT LAND USE AGGREGATIONS

- Residential
- Residential Acreage
- Commercial
- Industrial
- Institutional
- Infrastructure or Vacant
- Park or Recreation
- NAS JRB Property
- Water

CURRENT LAND USE

Land uses within the AICUZ and in the areas that neighbor the installation are shown in **Figures 9-10**. This 2020 land use data was provided by NCTCOG's Research & Information Services (RIS) department, which compiles and analyzes information on development in the North Central Texas region. RIS land use codes were first developed based on United States Geological Survey classifications, but have since been revised to suit local needs, according to the NCTCOG 2020 Land Use Inventory Methodology. For the map in **Figures 9-10** all land uses remain separate but these land uses were aggregated for the additional analysis contained in this white paper to reduce the number of categories and improve readability of the figures. These aggregations are as follows:

- Residential: Includes Single Family, Multi-Family Residential, Mobile Home, and Group Quarters
- Residential Acreage: Includes Residential Acreage (land that is mostly undeveloped, yet includes a residence)
- Commercial: Includes Commercial, Office, Retail, Hotel/Motel, and Mixed Use
- Industrial: Includes Industrial and Landfill
- Institutional: Includes Institutional/Semipublic and Education
- Infrastructure or Vacant: Includes Roadway, Utilities, Communication, Railroad, Transit, Airport, Runway, Flood Control, and Parking, Farm Land, Ranch Land, Timber Land, Improved Acreage, Undeveloped land as identified by parcel state land use code, and land under construction as identified through aerial photography and other NCTCOG data
- Parks or Recreation: Includes Parks/Recreation
- NAS JRB Property: Includes NAS JRB Property
- Water: Includes Small and Large Water Bodies

The percentage of total land area within the noise contours and safety zones are quantified for each aggregated land use in **Table 2** and **Figures 11-12**. Residential property decreases as a percentage of total land area as the contours increase in decibel level and as accident potential increases. When combined with NAS JRB Fort Worth property, Infrastructure increases as a percentage of total area as the contours increase in decibel level and as accident potential increases. Industrial land uses generally also show an increase as decibel levels increase. Compared with 2105 land use data, there is little change in the percentage of land area by land use classification. The exception is

JOINING FORCES

NORTH TEXAS

that Commercial land use shows a decrease in 75 decibel and higher noise contours as well as all safety zones, whereas Industrial land use shows a complementary increase in land use area. It seems likely that some of this change is due to how the RIS department has changed land use classifications over time, which is a challenge in using the data to make these comparisons over time.

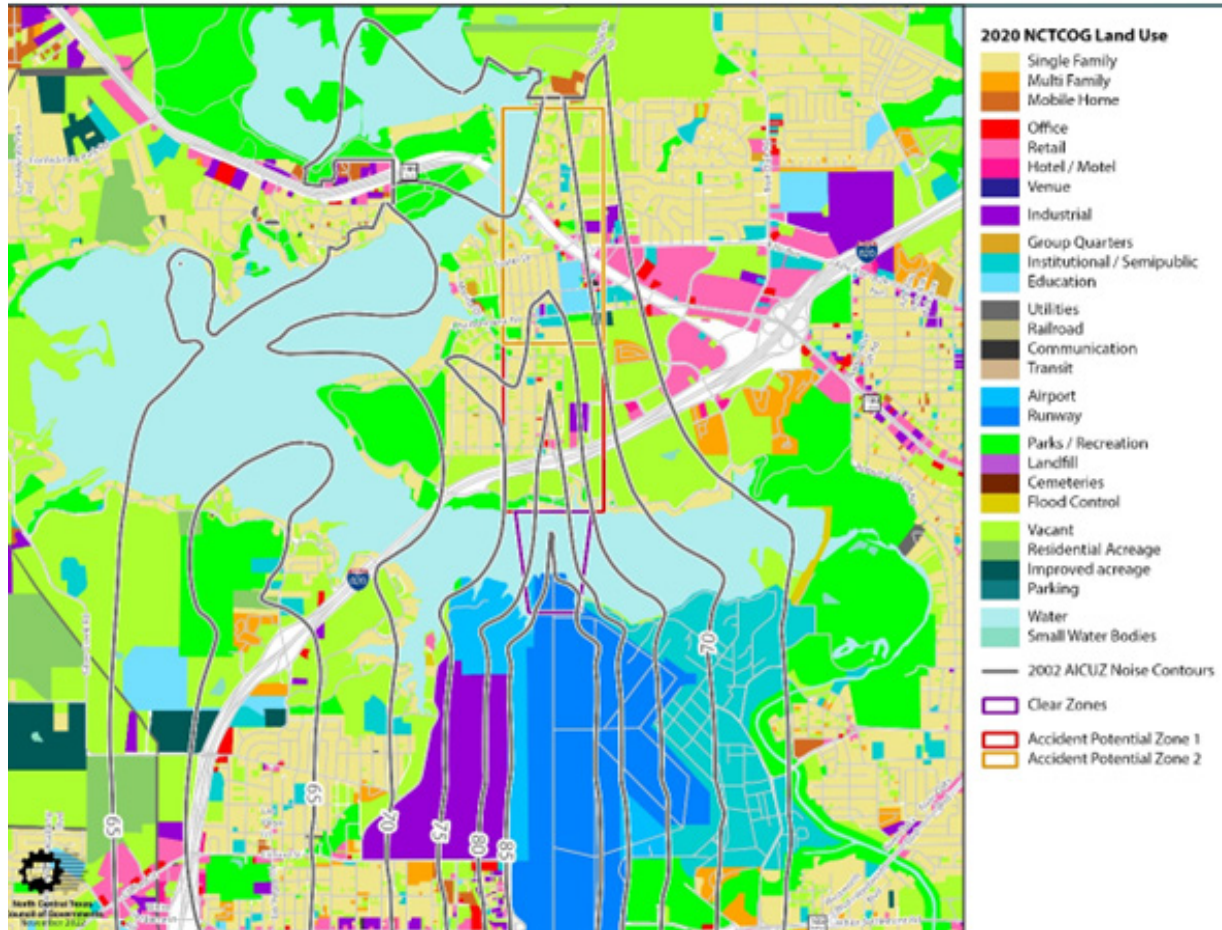
The 2020 land use for areas where land use changed between 2016 and 2020 (new development or redevelopment since the 2018 JLUS report) are shown in **Figures 13-14**. 2020 land use for areas where land used changed between 2005-2020 (over the duration of time the communities surrounding NAS JRB Fort Worth have focused on compatible development) are shown in **Figures 15-16**.

JOINING FORCES

NORTH TEXAS

Figure 9

2020 Land Use (North)



JOINING FORCES

NORTH TEXAS

Figure 11

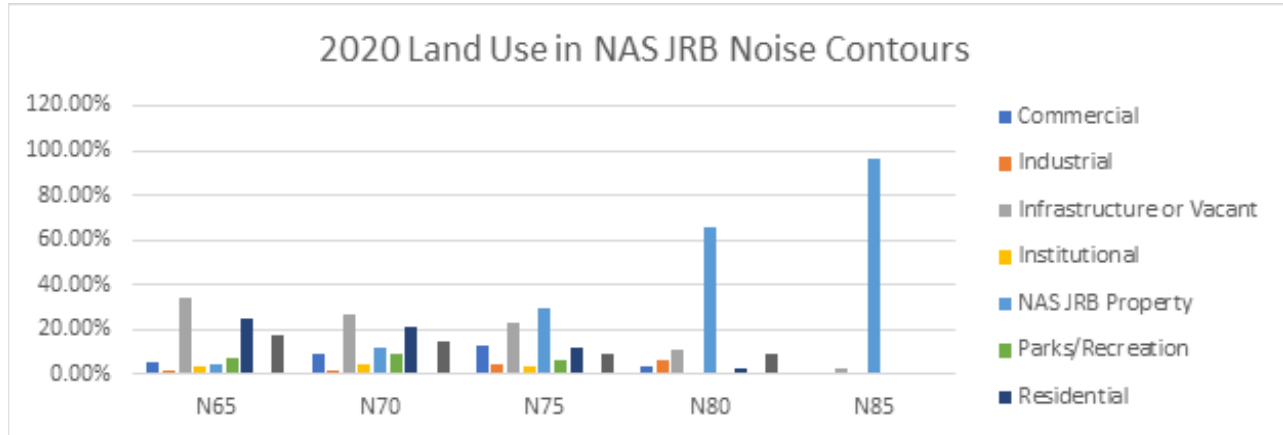
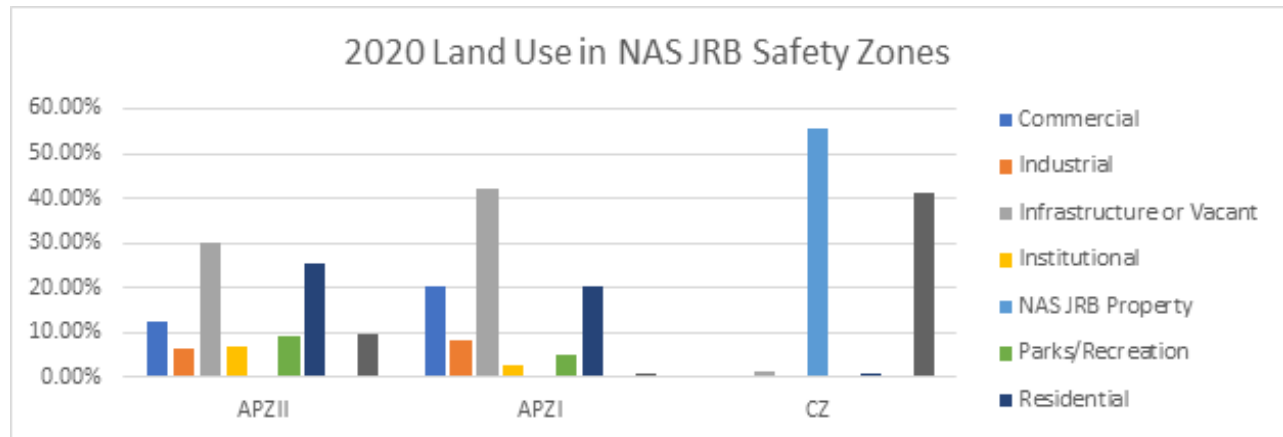


Figure 12

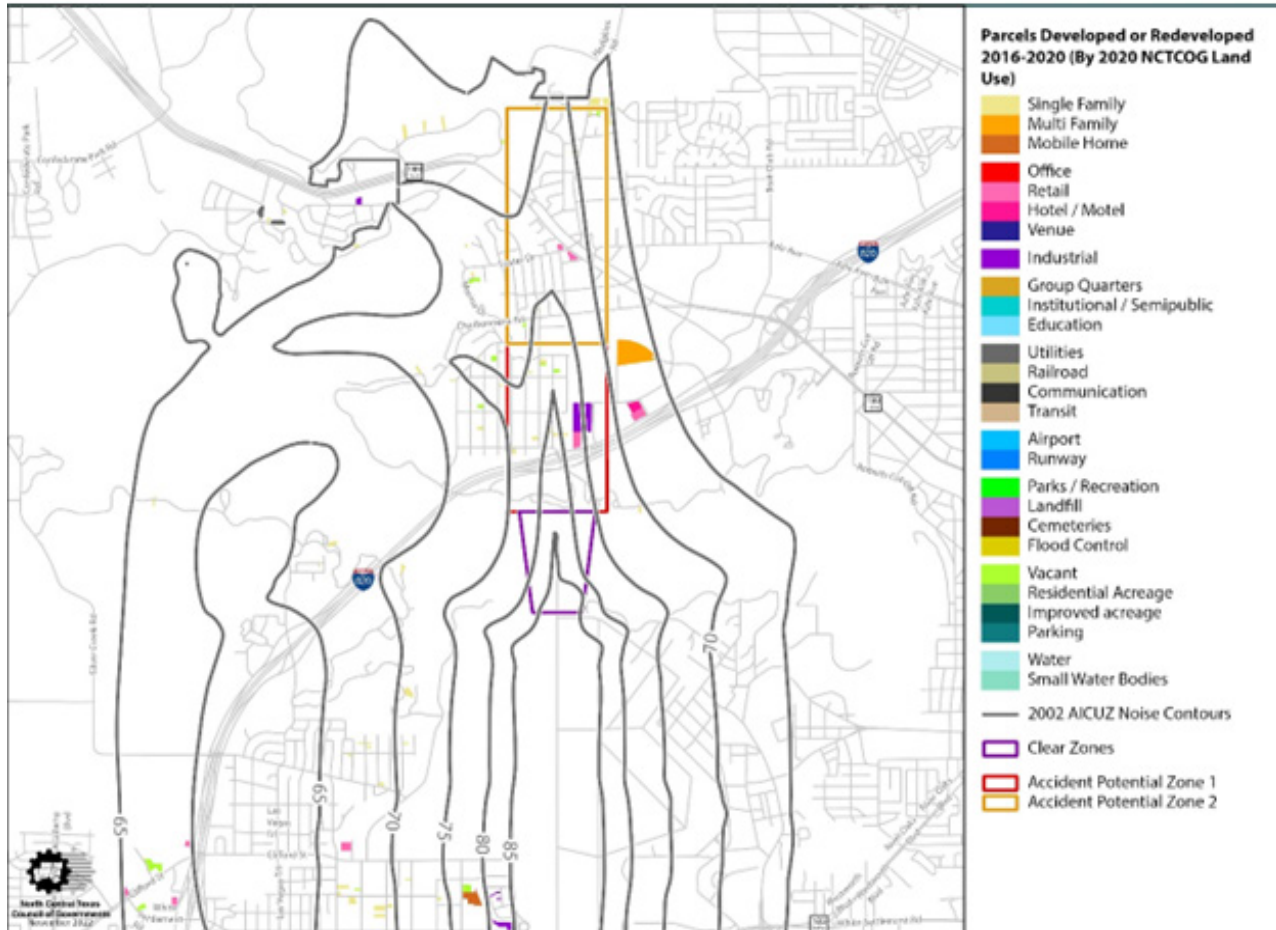


JOINING FORCES

NORTH TEXAS

Figure 13

Changed Parcels by Current Land Use (North)

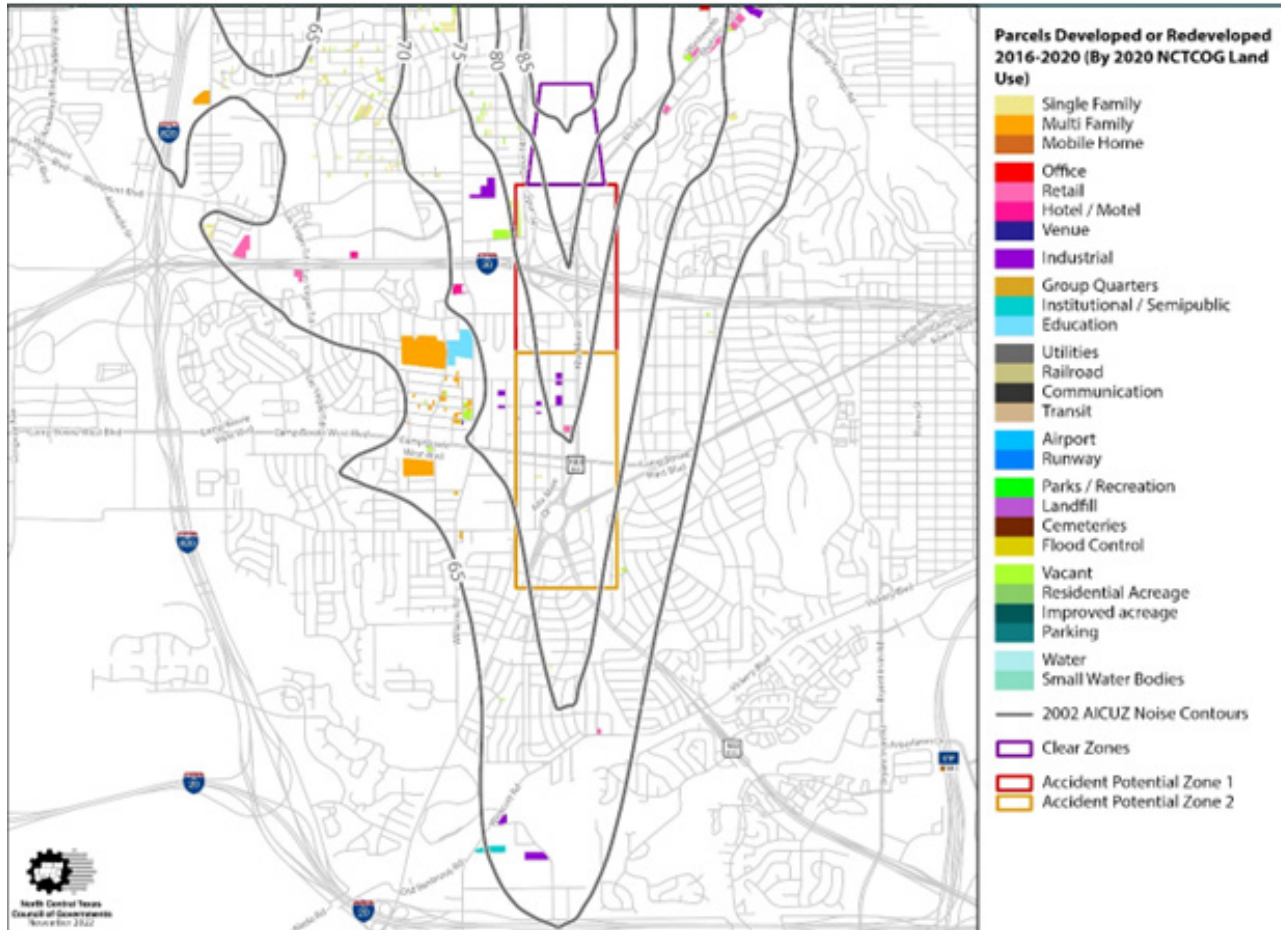


JOINING FORCES

NORTH TEXAS

Figure 14

Changed Parcels by Current Land Use (South)

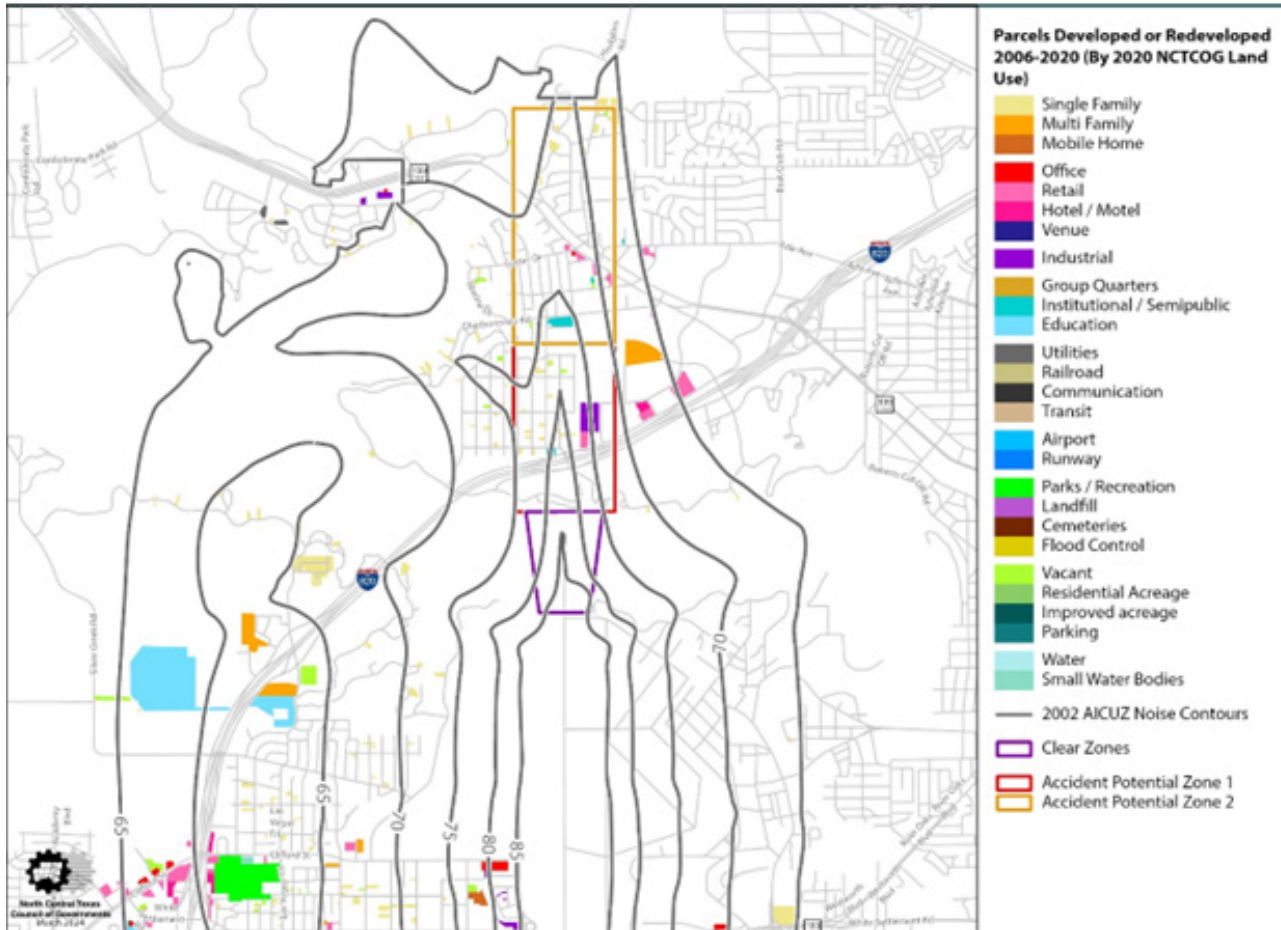


JOINING FORCES

NORTH TEXAS

Figure 15

Changed Parcels (2006-2020) by Current Land Use (North)

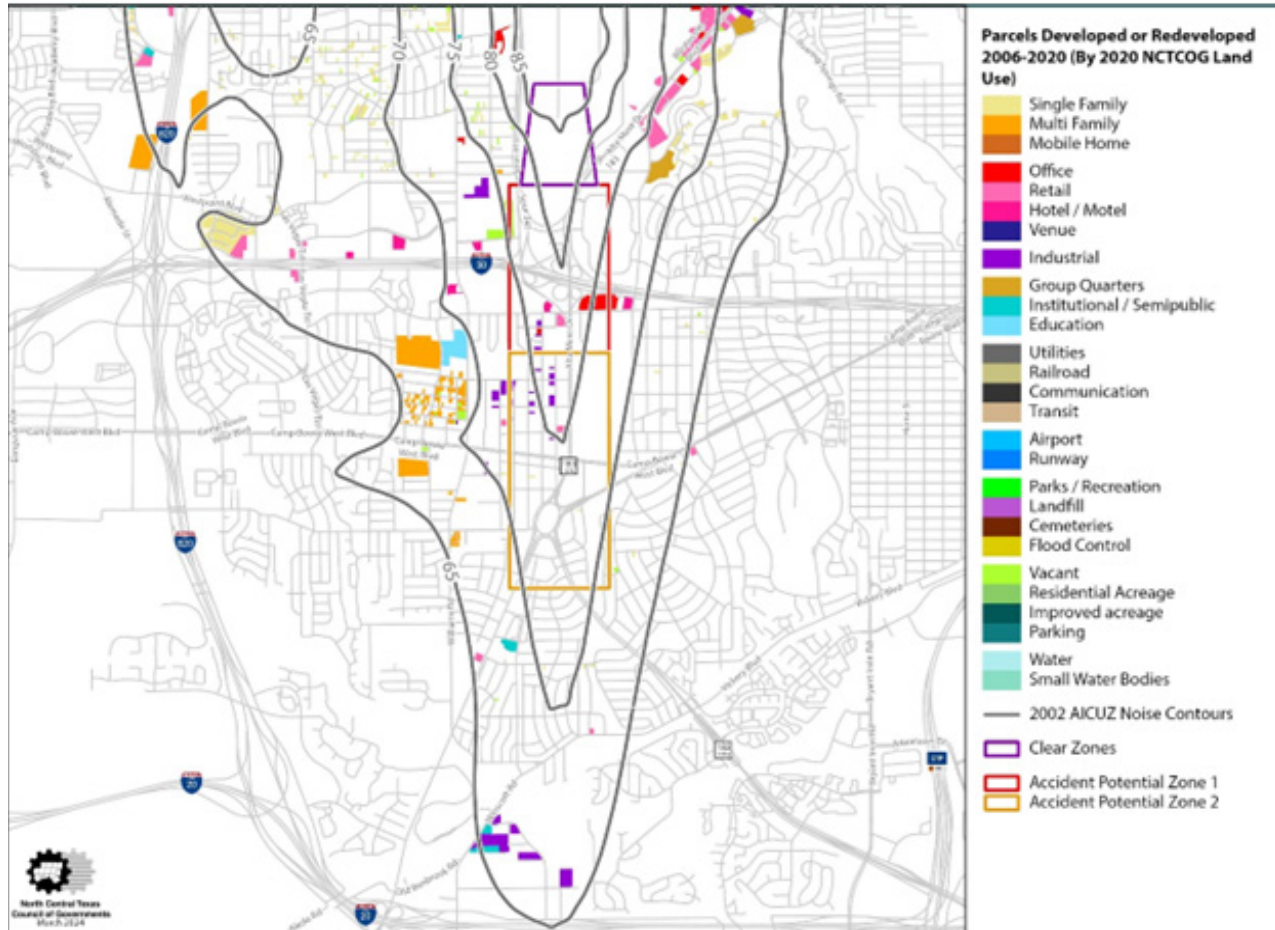


JOINING FORCES

NORTH TEXAS

Figure 16

Changed Parcels (2006-2020) by Current Land Use (South)



JOINING FORCES

NORTH TEXAS

"IN BOTH THE MOST RECENT 5-YEAR PERIOD AND THE OVERALL TIME PERIOD, THE VAST MAJORITY OF CHANGED LAND USE IS CONSIDERED COMPATIBLE."

COMPATIBILITY ANALYSIS

The Department of Defense designates specific land uses in the AICUZ as compatible, incompatible, or compatible if conditions are met, such as sound attenuation or local need. The Department of Defense applies these compatibility categories to Standard Land Use Coding Manual (SLUCM) land uses. The compatibility of SLUCMs in the noise contours are shown in **Table 3**. The compatibility of SLUCMs in the safety zones are shown in **Table 4**.

In the previous land use analysis, NCTCOG sought to identify increases or decreases in the compatibility of land that has changed use from 2005 to 2015. For the purposes of this analysis, SLUCM land uses were assigned to the RIS land uses they most closely matched (**Table 5**). At this time, land use data is available for 2020, so this current land use analysis will identify increases or decreases in the compatibility of land that has changed in the most recent 5-year period of 2016-2020 but also in the overall time period of 2005-2020. Because the land use codes used by RIS changed from 2005 to 2020, efforts also were made to match 2005 land uses to the 2020 land uses with which they best corresponded.

In the previous land use analysis, the compatibility assessment was completed separately for the noise contour recommendations and the safety zone recommendations. This led to complicated assessments where one parcel could be compatible with the noise guidelines but incompatible with the safety guidelines. In the real world, a parcel is either compatible or incompatible, so NCTCOG sought to combine the noise and safety recommendations into a single assessment of what land uses are compatible in each combined noise/safety zone (ex. Accident Potential Zone I and 70dB noise contour). **Table 6** shows the combined compatibility recommendations.

Based on the compatibility designations in **Table 5**, maps were generated showing increases and decreases in compatibility for areas within the AICUZ that changed land uses. **Figures 17-18** show the change in compatibility for parcels that changed in the most recent 5-year period of 2016-2020. **Figures 19-20** show the change in compatibility for parcels that changed in the overall time period of 2006-2020.

In order to simplify the information, maps and summary charts were then created to just show the changed parcels not by increase or decrease in compatibility, but just as compatible or incompatible. **Figures 21-22** show the 2020 compatibility of parcels that changed in the most recent 5-year period of 2016-2020. **Figures 23-24** show the 2020 compatibility of parcels that changed in the overall time period of 2006-2020. **Table 7** shows the number of changed parcels in the

JOINING FORCES

NORTH TEXAS

2016-2020 period in each combined noise and safety area by change in compatibility. **Table 8** shows the number of changed parcels in the overall time period of 2006-2020 in each combined noise and safety area by change in compatibility. **Figures 25-26** show the 2020 compatibility of all parcels in the AICUZ. **Figure 27** is a summary chart showing parcels broken down first by whether they changed during the 2006-2020 period, then broken down by the percent compatible or incompatible. **Figure 28** is a summary chart showing parcels broken down first by whether they are compatible or incompatible in 2020, then broken down by the percent that changed or had no development during the 2006-2020 time period.

The maps and assessment charts clearly show a majority of the changed parcels are compatible, with very little decrease in compatibility. In looking at the overall time period, there was also some change in land use that decreased compatibility in the higher noise contours outside the safety zones. But in both the most recent 5-year period and the overall time period, the vast majority of changed land use is considered compatible. This updated land use assessment added a category in the compatibility change assessment of "Previously Vacant." This category was encouraged by the cities surrounding NAS JRB Fort Worth in recognition of the fact that this is a highly urbanized and rapidly growing area. The intent of the efforts to focus on compatibility is not to have zero growth, so documenting that parcels that were previously vacant should not be shown as a decrease in compatibility, but rather a positive step taken by the community.

JOINING FORCES

NORTH TEXAS

Table 3

AIR INSTALLATIONS COMPATIBLE USE ZONES SUGGESTED LAND USE COMPATIBILITY IN NOISE ZONES

Land Use		Suggested Land Use Compatibility						
		Noise Zone 1 (DNL or CNEL)		Noise Zone 2 (DNL or CNEL)		Noise Zone 3 (DNL or CNEL)		
SLUCM NO	LAND USE NAME	< 55	55-64	65-69	70-74	75-79	80-84	85+
10	<i>Residential</i>							
11	Household Units	Y	Y ¹	N ¹	N ¹	N	N	N
11.11	Single units, detached	Y	Y ¹	N ¹	N ¹	N	N	N
11.12	Single units, semide- tached	Y	Y ¹	N ¹	N ¹	N	N	N
11.13	Single units: attached row	Y	Y ¹	N ¹	N ¹	N	N	N
11.21	Two units, side-by-side	Y	Y ¹	N ¹	N ¹	N	N	N
11.22	Two units, one above the other	Y	Y ¹	N ¹	N ¹	N	N	N
11.31	Apartments: walk-up	Y	Y ¹	N ¹	N ¹	N	N	N
11.32	Apartments: elevator	Y	Y ¹	N ¹	N ¹	N	N	N
12	Group quarters	Y	Y ¹	N ¹	N ¹	N	N	N
13	Residential Hotels	Y	Y ¹	N ¹	N ¹	N	N	N
14	Mobile home parks or courts	Y	Y ¹	N ¹	N ¹	N	N	N
15	Transient lodgings	Y	Y ¹	N ¹	N ¹	N	N	N
16	Other residential	Y	Y ¹	N ¹	N ¹	N	N	N
20	<i>Manufacturing</i>							
21	Food and kindred prod- ucts; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
22	Textile mill products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
23	Apparel and other fin- ished products; products made from fabrics, leath- er and similar materials; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N

JOINING FORCES

NORTH TEXAS

Table 3

Land Use		Suggested Land Use Compatibility						
		Noise Zone 1 (DNL or CNEL)		Noise Zone 2 (DNL or CNEL)		Noise Zone 3 (DNL or CNEL)		
SLUCM NO	LAND USE NAME	< 55	55-64	65-69	70-74	75-79	80-84	85+
24	Lumber and wood products (except furniture); manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
25	Furniture and fixtures; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
26	Paper and allied products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
27	Printing, publishing, and allied industries	Y	Y	Y	Y ²	Y ³	Y ⁴	N
28	Chemicals and allied industries; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
29	Petroleum refining and related industries	Y	Y	Y	Y ²	Y ³	Y ⁴	N
30	<i>Manufacturing (Continued)</i>							
31	Rubber and misc. plastic products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
32	Stone, clay and glass products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
33	Primary metal products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
34	Fabricated metal products; manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
35	Professional scientific, and controlling instruments; photographic and optical goods; watches and clocks	Y	Y	Y	25	30	N	N
39	Miscellaneous manufacturing	Y	Y	Y	Y ²	Y ³	Y ⁴	N
	<i>Transportation, Communication and utilities</i>							
41	Railroad, rapid rail transit, and street railway transportation	Y	Y	Y	Y ²	Y ³	Y ⁴	N
42	Motor vehicle transportation	Y	Y	Y	Y ²	Y ³	Y ⁴	N

JOINING FORCES

NORTH TEXAS

Table 3

Land Use		Suggested Land Use Compatibility						
		Noise Zone 1 (DNL or CNEL)		Noise Zone 2 (DNL or CNEL)		Noise Zone 3 (DNL or CNEL)		
SLUCM NO	LAND USE NAME	< 55	55-64	65-69	70-74	75-79	80-84	85+
43	Aircraft transportation	Y	Y	Y	Y ²	Y ³	Y ⁴	N
44	Marine creaft transpor- tation	Y	Y	Y	Y ²	Y ³	Y ⁴	N
45	Highway and street right- of-way	Y	Y	Y	Y ²	Y ³	Y ⁴	N
46	Automobile parking	Y	Y	Y	Y ²	Y ³	Y ⁴	N
47	Communication	Y	Y	Y	Y ²	Y ³	Y ⁴	N
48	utilities	Y	Y	Y	Y ²	Y ³	Y ⁴	N
49	Other transportation, communication and utilities	Y	Y	Y	Y ²	Y ³	Y ⁴	N
50	Trade							
51	Wholesale trade	Y	Y	Y	Y ²	Y ³	Y ⁴	N
52	Retail trade - building materials, hardware and farm equipment	Y	Y	Y	Y ²	Y ³	Y ⁴	N
53	Retail trade - shopping centers	Y	Y	Y	25	30	N	N
54	Retail trade - food	Y	Y	Y	25	30	N	N
55	Retail trade - automo- tive, marine craft, aircraft and accessories	Y	Y	Y	25	30	N	N
56	Retail trade - apparel and accessories	Y	Y	Y	25	30	N	N
57	Retail trade - furniture, home, furnishings and equipment	Y	Y	Y	25	30	N	N
58	Retail trade - eating and drinking establishments	Y	Y	Y	25	30	N	N
59	Other retail trade	Y	Y	Y	25	30	N	N
60	Services							
61	Finance, insurance and real estate services	Y	Y	Y	25	30	N	N
62	Personal services	Y	Y	Y	25	30	N	N

JOINING FORCES

NORTH TEXAS

Table 3

Land Use		Suggested Land Use Compatibility						
		Noise Zone 1 (DNL or CNEL)		Noise Zone 2 (DNL or CNEL)		Noise Zone 3 (DNL or CNEL)		
SLUCM NO	LAND USE NAME	< 55	55-64	65-69	70-74	75-79	80-84	85+
62.4	Cemeteries	Y	Y	Y	Y ²	Y ³	Y ^{4,11}	Y ^{6,11}
63	Business services	Y	Y	Y	25	30	N	N
63.7	Warehousing and stor- age	Y	Y	Y	Y ²	Y ³	Y ⁴	N
64	Repair Services	Y	Y	Y	Y ²	Y ³	Y ⁴	N
65	Professional services	Y	Y	Y	25	30	N	N
65.1	Hospitals, other medical fac.	Y	Y ¹	25	30	N	N	N
65.16	Nursing Homes	Y	Y	N ¹	N ¹	N	N	N
66	Contract construction services	Y	Y	Y	25	30	N	N
67	Government Services	Y	Y ¹	Y ¹	25	30	N	N
68	Educational services	Y	Y ¹	25	30	N	N	N
69	Miscellaneous	Y	Y ¹	Y	25	30	N	N
70	<i>Cultural, entertainment and recreational</i>							
71	Cultural activities (& churches)	Y	Y ¹	25	30	N	N	N
71.2	Nature exhibits	Y	Y ¹	Y ¹	N	N	N	N
72	Public assembly	Y	Y ¹	Y	N	N	N	N
72.1	Auditoriums, concert halls	Y	Y ¹	25	30	N	N	N
72.11	Outdoor music shells, amphitheaters	Y	Y ¹	N	N	N	N	N
72.2	Outdoor sports arenas, spectator sports	Y	Y ¹	Y ¹	Y ⁷	N	N	N
73	Amusements	Y	Y ¹	Y	Y	N	N	N
74	Recreational activities (including golf courses, riding stables, water rec. 1	Y	Y ¹	Y ¹	25	30	N	N
75	Resorts and group camps	Y	Y ¹	Y ¹	Y	N	N	N
76	Parks	Y	Y ¹	Y ¹	Y	N	N	N
79	Other cultural, entertain- ment and recreation	Y	Y ¹	Y ¹	Y	N	N	N

JOINING FORCES

NORTH TEXAS

Table 3

Land Use		Suggested Land Use Compatibility						
		Noise Zone 1 (DNL or CNEL)		Noise Zone 2 (DNL or CNEL)		Noise Zone 3 (DNL or CNEL)		
SLUCM NO	LAND USE NAME	< 55	55-64	65-69	70-74	75-79	80-84	85+
80	<i>Resource Production and Extraction</i>							
81	Agriculture (except live-stock)	Y	Y	Y ⁸	Y ⁹	Y ¹⁰	Y ^{10,11}	Y ^{10,11}
81.5	Livestock farming	Y	Y	Y ⁸	Y ⁹	N	N	N
81.7	Animal breeding	Y	Y	Y ⁸	Y ⁹	N	N	N
82	Agriculture related activities	Y	Y	Y ⁸	Y ⁹	Y ¹⁰	Y ^{10,11}	Y ^{10,11}
83	Forestry activities	Y	Y	Y ⁸	Y ⁹	Y ¹⁰	Y ^{10,11}	Y ^{10,11}
8-4	Fishing activities	Y	Y	Y	Y	Y	Y	Y
85	Mining activities	Y	Y	Y	Y	Y	Y	Y
89	Other resource production or extraction	Y	Y	Y	Y	Y	Y	Y

Key to Table 3 - Suggested Land Use Compatibility In. Noise Zones

SLUCM	Standard Land Use Coding Manual, U.S. Department of Transportation
Y (Yes)	Land use and related structures compatible without restrictions.
N (No)	Land Use and related structures are not compatible and should be prohibited.
Y ^x (Yes with Restrictions)	The land use and related structures are generally compatible. However, see notes indicated by the superscript.
N ^x (No with exceptions)	The land use and related structures are generally incompatible. However, see notes indicated by the superscript.
NLR (Noise Level Reduction) 25, 30, or 35	NLD (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure. The numbers refer to the NLR levels. Land Use and related structures generally compatible however, measures to achieve NLR of 25, 30 or 35 must be incorporated into design and construction of structures. However, measures to achieve an overall noise reduction do not necessarily solve noise difficulties outside the
DNL	Day Night Average Sound Level.
CNEL	Community Equivalent Level (normally within a very small decibel difference of DNL)
Ldn	Mathematical symbol for DNL.

JOINING FORCES

NORTH TEXAS

Table 3

Notes - Suggested Land Use Compatibility In Noise Zones

1. General

- a. Although local conditions regarding the need for housing may require residential use in these zones, residential use is discouraged in DNL 65 to 69 and strongly discouraged in DNL 70 to 74. The absence of viable alternative development options should be determined and an evaluation should be conducted locally prior to local approvals indicating that a demonstrated community need for the residential use would not be met if development were prohibited in these zones.

Where the community determines that these uses must be allowed measures to achieve and outdoor to indoor NLR of at least 25 Decibels (dB) in DNL 65 to 69 and NLR of 30 dB in DNL 70 to 74 should be incorporated into building codes and be in individual approvals; for transient housing a NLR of at least 35 dB should be incorporated in DNL 75 to 79.

- b. Normal permanent construction can be expected to provide a NLR of 20 dB, thus the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation, upgraded sound transmission class ratings in windows and doors and closed windows Year round. Additional consideration should be given to modifying NLR levels based on peak noise levels or vibrations.
- c. NLR criteria will not eliminate outdoor noise problems. However, building location and site planning, design and use of berms and barriers can help mitigate outdoor noise exposure NLR particularly from ground level sources. Measures that reduce noise at a site should be used wherever practical in preference to measures that only protect interior spaces.

2. Measures to achieve NLR of 25 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

3. Measures to achieve NLR of 30 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

4. Measures to achieve NLR of 35 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

5. If project or proposed development is noise sensitive, use indicated NLR; if not, land use is compatible without NLR.

6. No buildings.

7. Land use compatible provided special sound reinforcement systems are installed.

JOINING FORCES

NORTH TEXAS

Table 3

B. Residential buildings require a NLR of 25.

9. Residential buildings require a NLR of 30.

10. Residential buildings not permitted.

11. Land use not recommended, but if the community decides use is necessary, hearing protection devices should be worn.

JOINING FORCES

NORTH TEXAS

Table 4

AIR INSTALLATION COMPATIBLE USE ZONES SUGGESTED LAND USE COMPATIBILITY IN ACCIDENT POTENTIAL ZONES

SLUCM NO.	LAND USE NAME	CLEAR ZONE Recommendation	APZ-I Recommendation	APZ-II Recommendation	Density Recommendation
10	RESIDENTIAL				
11	Household Units				
11.11	Single units: detached	N	N	Y ²	Max density of 1-2 Du/Ac
11.12	Single units: semidetached	N	N	N	
11.13	Single units: attached row	N	N	N	
11.21	Two units: side-by-side	N	N	N	
11.22	Two units: one above the other	N	N	N	
11.31	Apartments: walk-up	N	N	N	
11.32	Apartments: elevator	N	N	N	
12	Group quarters	N	N	N	
13	Residential Hotels	N	N	N	
14	Mobile home parks or courts	N	N	N	
15	Transient lodgings	N	N	N	
16	Other residential	N	N	N	
20	MANUFACTURING³				
21	Food & kindred products; manufacturing	N	N	Y ²	Max FAR 0.56 in APZ II
22	Textile mill products; manufacturing	N	N	Y ²	same as above
23	Apparel and other finished products; products made from fabrics, leather and similar materials	N	N	N	

JOINING FORCES

NORTH TEXAS

Table 4

SLUCM NO.	LAND USE NAME	CLEAR ZONE Recommendation	APZ-I Recommendation	APZ-II Recommendation	Density Recommendation
24	Lumber and wood products (except furniture); manufacturing	N	Y	Y ²	Max FAR of 0.28 in APZ I & 0.56 in APZ II
25	Furniture and fixtures; manufacturing	N	Y	Y ²	same as above
26	Paper and allied products; manufacturing	N	Y	Y ²	same as above
27	Printing, publishing, and allied industries	N	Y	Y ²	same as above
28	Chemical and allied products; manufacturing	N	N	N	
29	Petroleum refining and related industries	N	N	N	
30	<i>MANUFACTURING³ (continued)</i>				
31	Rubber and misc. plastic products; manufacturing	N	N	N	
32	Stone, clay and glass products; manufacturing	N	N	Y	Max FAR 0.56 in APZ II
33	Primary metal products; manufacturing	N	N	N	Same as above
34	Fabricated metal products; manufacturing	N	N	Y	Same as above
35	Professional scientific & controlling instrument; photographic and optical goods; watches and clocks	N	N	N	
39	Miscellaneous manufacturing	N	Y	Y	Max FAR of 0.28 in APZ I & 0.56 in APZ II
40	<i>Transportation, communication and utilities^{4,5}</i>				
41	Railroad, rapid rail transit, and street railway transportation	N	Y ⁵	Y	Same as above
42	Motos vehicle transportation	N	Y ⁵	Y	Same as above

JOINING FORCES

NORTH TEXAS

Table 4

SLUCM NO.	LAND USE NAME	CLEAR ZONE Recommendation	APZ-I Recommendation	APZ-II Recommendation	Density Recommendation
43	Air craft transportation	N	Y ⁵	Y	Same as above
44	Marine craft transportation	N	Y ⁵	Y	Same as above
45	Highway and street right-of-way	N	Y ⁵	Y	Same as above
46	Auto parking	N	Y ⁵	Y	Same as above
47	Communication	N	Y ⁵	Y	Same as above
48	Utilities	N	Y ⁵	Y	Same as above
48.5	Solid waste disposal (Landfills, incineration, etc.)	N	N	N	
49	Other transport, comm. and utilities	N	Y ⁵	Y	See Note 6 below
50	Trade				
51	Wholesale trade	N	Y	Y	Max FAR of 0.28 in APZ I & 0.56 in APZ II
52	Retail trade - building materials, hardware and farm equipment	N	Y	Y	See Note 6 below
53	Retail trade - Shopping centers, Home Improvement Store, Discount Club, Electronics Superstore	N	N	Y	Max FAR of 0.16 in APZ II
54	Retail trade - food	N	N	Y	Max FAR of 0.24 in APZ II
55	Retail trade - automotive, marine craft, aircraft and accessories	N	Y	Y	Max FAR of 0.14 in APZ I & 0.28 in APZ II
56	Retail trade - apparel and accessories	N	N	Y	Max FAR 0.28 in APZ II
57	Retail trade - furniture, home, furnishings and equipment	N	N	Y	Same as above

JOINING FORCES

NORTH TEXAS

Table 4

SLUCM NO.	LAND USE NAME	CLEAR ZONE Recommendation	APZ-I Recommendation	APZ-II Recommendation	Density Recommendation
58	Retail trade - eating and drinking establishments	N	N	N	
59	Other retail trade	N	N	Y	Max FAR of 0.16 in APZ II
60	Services				
61	Finance, insurance and real estate services	N	N	Y	Max FAR of 0.22 for "General Office/ Office park" in APZ II
62	Personal services	N	N	Y	Office uses only. Max FAR of 0.22 in APZ II
62.4	Cemeteries	N	Y ⁹	Y ⁹	
63	Business services (credit reporting; mail, stenographic, reproduction; advertising)	N	N	Y	Max FAR of 0.22 in APZ II
63.7	Warehousing and storage services	N	Y ⁹	Y	Max FAR 1.0 APZ I; 2.0 in APZII
64	Repair services	N	Y	Y	Max FAR of 0.11 in APZ I; 0.22 in APZ II
65	Professional services	N	N	Y	Max FAR of 0.22 in APZ II
65.1	Hospitals, nursing homes	N	N	N	
65.1	Other medical facilities	N	N	N	
66	Contract construction services	N	Y	Y	Max FAR of 0.11 in APZ I; 0.22 in APZ II
67	Government Services	N	N	Y	Max FAR of 0.24 in APZ II
68	Educational services	N	N	N	
69	Miscellaneous	N	N	Y	Max FAR of 0.22 in APZ II

JOINING FORCES

NORTH TEXAS

Table 4

SLUCM NO.	LAND USE NAME	CLEAR ZONE Recommendation	APZ-I Recommendation	APZ-II Recommendation	Density Recommendation
70	<i>Cultural, entertainment and recreational</i>				
71	Cultural activities	N	N	N	
71.2	Nature exhibits	N	Y ¹⁰	Y ¹⁰	
72	Public assembly	N	N	N	
72.1	Auditoriums, concert halls	N	N	N	
72.11	Outdoor music shells, amphitheaters	N	N	N	
72.2	Outdoor sports arenas, spectator sports	N	N	N	
73	Amusements - fairgrounds, miniature golf, driving ranges, amusement parks, etc.	N	N	Y	
74	Recreational activities (including golf courses, riding stables, water recreation)	N	Y ¹⁰	Y ¹⁰	Max FAR of 0.11 APZ I; 0.22 in APZ II
75	Resorts and group camps	N	N	N	
76	Parks	N	Y ¹⁰	Y ¹⁰	Same as 74
79	Other cultural, entertainment and recreation	N	Y ⁹	Y ⁹	Same as 74
80	<i>Resource Production and Extraction</i>				
81	Agriculture (except livestock)	Y ⁴	Y ¹¹	Y ¹¹	
81.5, 81.7	Livestock farming and breeding	N	Y ^{11,12}	Y ^{11,12}	
82	Agriculture related activities	N	Y ¹¹	Y ¹¹	Max FAR of 0.28 in APZ I; 0.56 APZ II no activity which produces smoke, glare, or involves explosives
83	Forestry Activities ¹²	N	Y	Y	Same as above

JOINING FORCES

NORTH TEXAS

Table 4

SLUCM NO.	LAND USE NAME	CLEAR ZONE Recommendation	APZ-I Recommendation	APZ-II Recommendation	Density Recommendation
84	Fishing Activities ¹⁴	N ¹⁴	Y	Y	Same as above
85	Mining Activities	N	Y	Y	Same as above
89	Other resource production or extraction	N	Y	Y	Same as above
90	<i>Other</i>				
91	Undeveloped Land	Y ⁴	Y	Y	
93	Water Areas	N ¹⁵	N ¹⁵	N ¹⁵	

Key to Table 4 - Suggested Land Use Compatibility In Accident Potential Zones

SLUCM	Standard Land Use Coding Manual, U.S. Department of Transportation
Y (Yes)	Land use and related structures compatible without restriction.
N (No)	Land use and related structures are not compatible and should be prohibited.
Y ^x - (Yes with Restrictions)	The land use and related structures are generally compatible. However, see notes indicated by the superscript.
N ^x - (No with exceptions)	The land use and related structures are generally incompatible. However, see notes indicated by the superscript.
FAR - Floor Area Ratio	A floor area ratio is the ratio between the square feet of floor area of the building and the site area. It is customarily used to measure non-residential intensities.
Du/Ac - Dwelling Units per Acre	This metric is customarily used to measure residential densities.

JOINING FORCES

NORTH TEXAS

Table 4

Notes - Suggested Land Use Compatibility in Accident Potential Zones

The following notes refer to Table 4.

1. A "Yes" or a "No" designation for compatible land use is to be used only for general comparison. Within each, uses exist where further evaluation may be needed in each category as to whether it is clearly compatible, normally compatible, or not compatible due to the variation of densities of people and structures. In order to assist installations and local governments, general suggestions as to FARs are provided as a guide to density in some categories. In general, land use restrictions which limit commercial, services, or industrial buildings or structure occupants to 25 per acre in APZ I, and 50 per acre in APZ II are the range of occupancy levels, including employees, considered to be low density. Outside events should normally be limited to assemblies of not more than 25 people per acre in APZ I, and Maximum (Max) assemblies of 50 people per acre in APZ II.
2. The suggested Max density for detached single-family housing is one to two Du/Ac. In a Planned Unit Development (PUD) of single family detached units where clustered housing development results in large open areas, this density could possibly be increased provided the amount of surface area covered by structures does not exceed 20 percent of the PUD total area.

PUD encourages clustered development that leaves large open areas.
3. Other factors to be considered: labor intensity, structural coverage, explosive characteristics, air-pollution, electronic interference with aircraft, height of structures, and potential glare to pilots.
4. No structures (except airfield lighting), buildings or aboveground utility/communications lines should normally be located in clear zone areas on or off the installation. The clear zone is subject to severe restrictions. See UFC 3 -260-01, "Airfield and Heliport Planning and Design" dated 10 November 2001 for specific design details.
5. No passenger terminals and no major above ground transmission lines in APZ I.
6. Within SLUCM Code 52, Max FARs for lumber Yards (SLUCM Code 521) are 0.20 in APZ-I and 0.40 in APZ-II. For hardware/paint and farm equipment stores, SLUCM Code 525, the Max FARs are 0.12 in APZ-I and 0.24 in APZ-II.
7. A shopping center is an integrated group of commercial establishments that is planned, developed, owned, or managed as a unit. Shopping center types include strip, neighborhood, community, regional, and super regional facilities anchored by small businesses, supermarket or drug store, discount retailer, department store, or several department stores, respectively. Included in this category are such uses as big box discount clubs, home improvement superstores, office supply superstores, and electronics superstores. The Max recommended FAR for SLUCM 53 should be applied to the gross leasable area of the shopping center rather than attempting to use other recommended FARs listed in Table 2 under "Retail" or "Trade."

JOINING FORCES

NORTH TEXAS

Table 4

8. Low intensity office uses only. Accessory uses such as meeting places, auditoriums, etc., are not recommended.
9. No chapels are allowed within APZ I or APZ II.
10. Facilities must be low intensity, and provide no tot lots, etc. Facilities such as clubhouses, meeting places, auditoriums, large classes, etc. are not recommended.
11. Includes livestock grazing, but excludes feedlots and intensive animal husbandry. Activities that attract concentrations of birds creating a hazard to aircraft operations should be excluded.
12. Includes feedlots and intensive animal husbandry.
13. Lumber and timber products removed due to establishment, expansion, or maintenance of clear zones will be disposed of in accordance with appropriate DoD Natural Resources instructions.
14. Controlled hunting and fishing may be permitted for the purpose of wildlife management.
15. Naturally occurring water features (e.g., rivers, lakes, streams, (wetlands) are compatible.

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
	Residential	Residential	Residential	Residential
65-69dB			1-2 DU/Ac, 25dB noise reduction, discouraged	Single units: detached - 25dB noise reduction, discouraged
				Single units: semi-detached - 25dB noise reduction, discouraged
				Single units: attached row - 25dB noise reduction, discouraged
				Two units, side-by-side - 25dB noise reduction, discouraged
				Two units, one above the other - 25dB noise reduction, discouraged
				Apartments: walk-up - 25dB noise reduction, discouraged
				Apartments: elevator - 25dB noise reduction, discouraged
				Group quarters - 25dB noise reduction, discouraged
				Residential Hotels - 25dB noise reduction, discouraged
				Mobile home parks or courts - 25dB noise reduction, discouraged
				Transient lodgings - 25dB noise reduction, discouraged

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
65-69dB				Other residential - 25dB noise reduction, discouraged
	<u>Manufacturing</u>	<u>Manufacturing</u>	<u>Manufacturing</u>	<u>Manufacturing</u>
			Food & kindred products - max FAR of 0.56	Food & kindred products
			Textile mill products - max FAR of 0.56	Textile mill products
				Apparel and other finished products; products made from fabrics, leather and similar materials
		Lumber and wood products (except furniture) - max FAR of 0.28	Lumber and wood products (except furniture) - max FAR of 0.56	Lumber and wood products (except furniture)
		Furniture and fixtures - max FAR of 0.28	Furniture and fixtures - max FAR of 0.56	Furniture and fixtures
		Paper and allied products - max FAR of 0.28	Paper and allied products - max FAR of 0.56	Paper and allied products
		Printing, publishing and allied industries - max FAR of 0.28	Printing, publishing and allied industries - max FAR of 0.56	Printing, publishing and allied industries
				Chemicals and allied products
				Petroleum and allied products
				Rubber and misc. plastic products
			Stone, clay and glass products - max FAR of 0.56	Stone, clay and glass products
		Primary metal products - max FAR of 0.56	Primary metal products	

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
65-69dB			Fabricated metal products - max FAR of 0.56	Fabricated metal products
				Professional scientific, and controlling instruments; photographic and optical goods; watches and clocks
		Miscellaneous manufacturing - max FAR of 0.28	Miscellaneous manufacturing - max FAR of 0.56	Miscellaneous manufacturing
	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>
		Railroad, rapid rail transit, and street railway transportation - max FAR of 0.28, no passenger terminals	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.56	Railroad, rapid rail transit, and street railway transportation
		Motor vehicle transportation - max FAR of 0.28, no passenger terminals	Motor vehicle transportation - max FAR of 0.56	Motor vehicle transportation
		Aircraft transportation - max FAR of 0.28, no passenger terminals	Aircraft transportation - max FAR of 0.56	Aircraft transportation
		Marine craft transportation - max FAR of 0.28, no passenger terminals	Marine craft transportation - max FAR of 0.56	Marine craft transportation
		Highway and street right-of-way	Highway and street right-of-way	Highway and street right-of-way
		Auto parking - max FAR of 0.28, no passenger terminals	Auto parking - max FAR of 0.56	Auto parking

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
65-69dB		Communication - max FAR of 0.28, no above ground trans- mission lines	Communication - max FAR of 0.56	Communication
		Utilities - max FAR of 0.28, no above ground transmission lines	Utilities - max FAR of 0.56	Utilities
				Solid waste disposal (landfills, incinera- tion, etc.)
		Other transport, comm. And utilities - max FAR of 0.28, no passenger terminals, no above ground transmission lines	Other transport, comm, and utilities - max FAR of 0.56	Other transport, comm, and utilities
		<u>Trade</u>	<u>Trade</u>	<u>Trade</u>
		Wholesale trade - max FAR of 0.28	Wholesale trade - max FAR of 0.56	Wholesale trade
		Retail trade - building materials, hardware and farm equipment - max FAR of 0.12	Retail trade - building materials, hardware and farm equipment - max FAR of 0.24	Retail trade - building materials, hardware and farm equipment
			Retail trade - shop- ping centers, home improvement store, discount club, elec- tronics superstore - max FAR of 0.16	Retail trade - shop- ping centers, home improvement store, discount club, elec- tronics superstore
			Retail trade - food - max FAR of 0.24	Retail trade - food
		Retail trade - auto- motive, marine craft, aircraft and acces- sories - max FAR of 0.14	Retail trade - auto- motive, marine craft, aircraft and acces- sories - max FAR of 0.28	Retail trade - auto- motive, marine craft, aircraft and acces- sories
		Retail trade - apparel and accessories - max FAR of 0.28	Retail trade - apparel and accessories	

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
65-69dB			Retail trade - furniture, home, furnishings and equipment - max FAR of 0.28	Retail trade - furniture, home, furnishings and equipment
				Retail trade - eating and drinking establishments
			Other retail trade - max FAR of 0.16	Other retail trade
		Services	Services	Services
			Finance, insurance and real estate services - max FAR of 0.22	Finance, insurance and real estate services
			Personal services - max FAR of 0.22, office uses only	Personal services
		Cemeteries - no chapels	Cemeteries - no chapels	Cemeteries
			Business services (credit reporting; mail, stenographic, reproduction; advertising) - max FAR of 0.22	Business services (credit reporting; mail, stenographic, reproduction; advertising)
			Warehousing and storage - max FAR of 1.0	Warehousing and storage
		Repair services - max FAR of 0.11	Repair services - max FAR of 0.22	Repair services
			Professional services - max FAR of 0.22	Professional services
				Hospitals, other medical - 25dB noise reduction
			Nursing home - 25dB noise reduction, discouraged	

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
65-69dB		Contract construction services - max FAR of 0.11	Contract construction services - max FAR of 0.22	Contract construction services
			Government services - max FAR of 0.24, 25dB noise reduction	Government services - 25dB noise reduction
				Educational services - 25dB noise reduction
			Miscellaneous services - max FAR of 0.22	Miscellaneous services
	<u>Cultural, entertainment and recreational</u>	<u>Cultural, entertainment and recreational</u>	<u>Cultural, entertainment and recreational</u>	<u>Cultural, entertainment and recreational</u>
				Cultural activities and churches - 25dB noise reduction
		Nature exhibits - low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Nature exhibits - low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Nature exhibits - 25dB noise reduction
				Public assembly
				Auditoriums, concert halls - 25dB noise reduction
				Outdoor sports arenas, spectator sports - 25dB noise reduction
		Amusements - fairgrounds, miniature golf, driving ranges, amusement parks, etc.	Amusements - fairgrounds, miniature golf, driving ranges, amusement parks, etc.	

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
65-69dB		Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.11, low intensity (no tot lots, meetings places, etc), 25dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.22, low intensity (no tot lots, meetings places, etc), 25dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - 25dB noise reduction
				Resorts and group camps - 25dB noise reduction
		Parks - max FAR of 0.11, low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Parks - max FAR of 0.22, low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Parks - 25dB noise reduction
		Other cultural, entertainment and recreation - max FAR of 0.11, no chapels, 25dB noise reduction	Other cultural, entertainment and recreation - max FAR of 0.22, no chapels, 25dB noise reduction	Other cultural, entertainment and recreation - 25dB noise reduction
	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>
	Agriculture (except livestock) - no above ground structures	Agriculture (except livestock) - no activities that attract concentration of birds, no residential buildings	Agriculture (except livestock) - no activities that attract concentration of birds, residential buildings 25dB noise reduction	Agriculture (except livestock) - residential buildings 25dB noise reduction
		Livestock farming and breeding - no activities that attract concentration of birds, no residential buildings	Livestock farming and breeding - no activities that attract concentration of birds, residential buildings 25dB noise reduction	Livestock farming and breeding - residential buildings 25dB noise reduction

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
65-69dB		Agriculture related activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential buildings	Agriculture related activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, residential buildings 25dB noise reduction	Agriculture related activities - residential buildings 25dB noise reduction
		Forestry activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no residential buildings	Forestry activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, residential buildings 25dB noise reduction	Forestry activities - residential buildings 25dB noise reduction
		Fishing activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Fishing activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Fishing activities
		Mining activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Mining activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Mining activities
		Other resource production or extraction - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Other resource production or extraction - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Other resource production or extraction
	<u>Other</u>	<u>Other</u>	<u>Other</u>	<u>Other</u>
	Vacant land	Vacant land	Vacant land	Vacant land

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
65-69dB	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>
	None	Fort Worth - north	Fort Worth - north, south	Benbrook
			Lake Worth	Fort Worth
				Lake Worth
				Westworth Village
				White Settlement
70-74dB	<u>Residential</u>	<u>Residential</u>	<u>Residential</u>	<u>Residential</u>
			Single units: detached - max density of 1-2 DU/Ac, 30dB noise reduction, discouraged	Single units: detached - 30dB noise reduction, discouraged
				Single units, semi-detached - 30dB noise reduction, discouraged
				Single units: attached row - 30dB noise reduction, discouraged
				Two units, side-by-side - 30dB noise reduction, discouraged
				Two units, one above the other - 30dB noise reduction, discouraged
				Apartments: walk-up - 30dB noise reduction, discouraged
				Apartment: elevator - 30dB noise reduction, discouraged

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
70-74dB				Group quarters - 30dB noise reduction, discouraged
				Residential Hotels - 30dB noise reduction, discouraged
				Mobile home parks or courts - 30dB noise reduction, discouraged
				Transient lodgings - 30dB noise reduction, discouraged
				Other residential - 30dB noise reduction, discouraged
	Manufacturing	Manufacturing	Manufacturing	Manufacturing
			Food & kindred products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Food & kindred products - 25dB noise reduction in public/quiet areas
			Textile mill products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Textile mill products - 25dB noise reduction in public/quiet areas
				Apparel and other finished products; products made from fabrics, leather and similar materials - 25dB noise reduction in public/quiet areas
		Lumber and wood products (except furniture) - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - 25dB noise reduction in public/quiet areas

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
70-74dB		Furniture and fixtures - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Furniture and fixtures - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Furniture and fixtures - 25dB noise reduction in public/quiet areas
		Paper and allied products - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Paper and allied products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Paper and allied products - 25dB noise reduction in public/quiet areas
		Printing, publishing and allied industries - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Printing, publishing and allied industries - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Printing, publishing and allied industries - 25dB noise reduction in public/quiet areas
				Chemicals and allied products - 25dB noise reduction in public/quiet areas
				Petroleum and allied products - 25dB noise reduction in public/quiet areas
				Rubber and misc. plastic products - 25dB noise reduction in public/quiet areas
			Stone, clay and glass products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Stone, clay and glass products - 25dB noise reduction in public/quiet areas
			Primary metal products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Primary metal products - 25dB noise reduction in public/quiet areas

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
70-74dB			Fabricated metal products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Fabricated metal products - 25dB noise reduction in public/quiet areas
				Professional scientific, and controlling instruments; photographic and optical goods; watches and clocks - 25dB noise reduction
		Miscellaneous manufacturing - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Miscellaneous manufacturing - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Miscellaneous manufacturing - 25dB noise reduction in public/quiet areas
	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>
		Railroad, rapid rail transit, and street railway transportation - max FAR of 0.28, no passenger terminals, 25dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - 25dB noise reduction in public/quiet areas
		Motor vehicle transportation - max FAR of 0.28, no passenger terminals, 25dB noise reduction in public/quiet areas	Motor vehicle transportation - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Motor vehicle transportation - 25dB noise reduction in public/quiet areas
		Aircraft transportation - max FAR of 0.28, no passenger terminals, 25dB noise reduction in public/quiet areas	Aircraft transportation - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Aircraft transportation - 25dB noise reduction in public/quiet areas

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
70-74dB		Marine craft transportation - max FAR of 0.28, no passenger terminals, 25dB noise reduction in public/quiet areas	Marine craft transportation - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Marine craft transportation - 25dB noise reduction in public/quiet areas
		Highway and street right-of-way	Highway and street right-of-way	Highway and street right-of-way
		Auto parking - max FAR of 0.28, no passenger terminals, 25dB noise reduction in public/quiet areas	Auto parking - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Auto parking - 25dB noise reduction in public/quiet areas
		Communication - max FAR of 0.28, no above ground transmission lines, 25dB noise reduction if project is noise sensitive	Communication - max FAR of 0.56, 25dB noise reduction if project is noise sensitive	Communication - 25dB noise reduction if project is noise sensitive
		Utilities - max FAR of 0.28, no above ground transmission lines, 25dB noise reduction in public/quiet areas	Utilities - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Utilities - 25dB noise reduction in public/quiet areas
				Solid waste disposal (landfills, incineration, etc.)
		Other transport, comm. And utilities - max FAR of 0.28, no passenger terminals, no above ground transmission lines, 25dB noise reduction if project is noise sensitive	Other transport, comm, and utilities - max FAR of 0.56, 25dB noise reduction if project is noise sensitive	Other transport, comm, and utilities - 25dB noise reduction if project is noise sensitive

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
	Trade	Trade	Trade	Trade
		Wholesale trade - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Wholesale trade - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Wholesale trade - 25dB noise reduction in public/quiet areas
		Retail trade - building materials, hardware and farm equipment - max FAR of 0.12, 25dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - max FAR of 0.24, 25dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - 25dB noise reduction in public/quiet areas
			Retail trade - shopping centers, home improvement store, discount club, electronics superstore - max FAR of 0.16, 25dB noise reduction	Retail trade - shopping centers, home improvement store, discount club, electronics superstore - 25dB noise reduction
70-74dB			Retail trade - food - max FAR of 0.24, 25dB noise reduction	Retail trade - food - 25dB noise reduction
		Retail trade - automotive, marine craft, aircraft and accessories - max FAR of 0.14, 25dB noise reduction	Retail trade - automotive, marine craft, aircraft and accessories - max FAR of 0.28, 25dB noise reduction	Retail trade - automotive, marine craft, aircraft and accessories - 25dB noise reduction
			Retail trade - apparel and accessories - max FAR of 0.28, 25dB noise reduction	Retail trade - apparel and accessories - 25dB noise reduction
			Retail trade - furniture, home, furnishings and equipment - max FAR of 0.28, 25dB noise reduction	Retail trade - furniture, home, furnishings and equipment - 25dB noise reduction
				Retail trade - eating and drinking establishments - 25dB noise reduction

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
70-74dB			Other retail trade - max FAR of 0.16, 25dB noise reduction	Other retail trade - 25dB noise reduction
	<u>Services</u>	<u>Services</u>	<u>Services</u>	<u>Services</u>
			Finance, insurance and real estate services - max FAR of 0.22, 25dB noise reduction	Finance, insurance and real estate services - 25dB noise reduction
			Personal services - max FAR of 0.22, of- fice uses only, 25dB noise reduction	Personal services - 25dB noise reduction
		Cemeteries - no chapels, 25dB noise reduction in public/ quiet areas	Cemeteries - no chapels, 25dB noise reduction in public/ quiet areas	Cemeteries - 25dB noise reduction in public/quiet areas
			Business services (credit reporting; mail, stenographic, reproduction; ad- vertising) - max FAR of 0.22, 25dB noise reduction	Business services (credit reporting; mail, stenographic, reproduction; adver- tising) - 25dB noise reduction
		Warehousing and storage - max FAR of 1.0, 25dB noise reduction in public/ quiet areas	Warehousing and storage - max FAR of 2.0, 25dB noise reduction in public/ quiet areas	Warehousing and storage - 25dB noise reduction in public/ quiet areas
		Repair services - max FAR of 0.11, 25dB noise reduction in public/quiet areas	Repair services - max FAR of 0.22, 25dB noise reduction in public/quiet areas	Repair services - 25dB noise reduction in public/quiet areas
			Professional services - max FAR of 0.22, 25dB noise reduction	Professional services - 25dB noise reduc- tion
				Hospitals, other medical - 30dB noise reduction

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
70-74dB				Nursing home - 30dB noise reduction, discouraged
		Contract construction services - max FAR of 0.11, 25dB noise reduction	Contract construction services - max FAR of 0.22, 25dB noise reduction	Contract construction services - 25dB noise reduction
			Government services - max FAR of 0.24, 25dB noise reduction	Government services - 25dB noise reduction
				Educational services - 30dB noise reduction
			Miscellaneous services - max FAR of 0.22, 25dB noise reduction	Miscellaneous services - 25dB noise reduction
		<u>Cultural, entertainment and recreational</u>	<u>Cultural, entertainment and recreational</u>	<u>Cultural, entertainment and recreational</u>
				Cultural activities and churches - 30dB noise reduction
				Auditoriums, concert halls - 30dB noise reduction
				Outdoor sports arenas, spectator sports - special sound reinforcement system
			Amusements - fairgrounds, miniature golf, driving ranges, amusement parks, etc.	Amusements - fairgrounds, miniature golf, driving ranges, amusement parks, etc.

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
70-74dB		Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.11, low intensity (no tot lots, meetings places, etc), 25dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.22, low intensity (no tot lots, meetings places, etc), 25dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - 25dB noise reduction
				Resorts and group camps - 25dB noise reduction
		Parks - max FAR of 0.11, low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Parks - max FAR of 0.22, low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Parks - 25dB noise reduction
		Other cultural, entertainment and recreation - max FAR of 0.11, no chapels, 25dB noise reduction	Other cultural, entertainment and recreation - max FAR of 0.22, no chapels, 25dB noise reduction	Other cultural, entertainment and recreation - 25dB noise reduction
	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>
	Agriculture (except livestock) - no above ground structures	Agriculture (except livestock) - no activities that attract concentration of birds, no residential buildings	Agriculture (except livestock) - no activities that attract concentration of birds, residential buildings 30dB noise reduction	Agriculture (except livestock) - residential buildings 30dB noise reduction
		Livestock farming and breeding - no activities that attract concentration of birds, no residential buildings	Livestock farming and breeding - no activities that attract concentration of birds, residential buildings 30dB noise reduction	Livestock farming and breeding - residential buildings 30dB noise reduction

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
70-74dB		Agriculture related activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential buildings	Agriculture related activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, residential buildings 30dB noise reduction	Agriculture related activities - residential buildings 30dB noise reduction
		Forestry activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no residential buildings	Forestry activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, residential buildings 30dB noise reduction	Forestry activities - residential buildings 30dB noise reduction
		Fishing activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Fishing activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Fishing activities
		Mining activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Mining activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Mining activities
		Other resource production or extraction - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Other resource production or extraction - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Other resource production or extraction
	<u>Other</u>	<u>Other</u>	<u>Other</u>	<u>Other</u>
	Vacant land	Vacant land	Vacant land	Vacant land

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
70-74dB	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>
	None	Fort Worth - north, south	Fort Worth - north, south	Fort Worth
		Lake Worth	Lake Worth	Lake Worth
		White Settlement		Westworth Village
				White Settlement
75-79dB	<u>Residential</u>	<u>Residential</u>	<u>Residential</u>	<u>Residential</u>
				Transient lodgings - 35dB noise reduction, discouraged
	<u>Manufacturing</u>	<u>Manufacturing</u>	<u>Manufacturing</u>	<u>Manufacturing</u>
			Food & kindred products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Food & kindred products - 30dB noise reduction in public/quiet areas
			Textile mill products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Textile mill products - 30dB noise reduction in public/quiet areas
				Apparel and other finished products; products made from fabrics, leather and similar materials - 30dB noise reduction in public/quiet areas
		Lumber and wood products (except furniture) - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - 30dB noise reduction in public/quiet areas

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
75-79dB		Furniture and fixtures - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Furniture and fixtures - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Furniture and fixtures - 30dB noise reduction in public/quiet areas
		Furniture and fixtures - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Furniture and fixtures - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Paper and allied products - 30dB noise reduction in public/quiet areas
		Paper and allied products - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Paper and allied products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Paper and allied products - 30dB noise reduction in public/quiet areas
		Printing, publishing and allied industries - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Printing, publishing and allied industries - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Printing, publishing and allied industries - 30dB noise reduction in public/quiet areas
				Chemicals and allied products - 30dB noise reduction in public/quiet areas
				Petroleum and allied products - 30dB noise reduction in public/quiet areas
				Rubber and misc. plastic products - 30dB noise reduction in public/quiet areas
			Stone, clay and glass products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Stone, clay and glass products - 30dB noise reduction in public/quiet areas

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
75-79dB			Primary metal products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Primary metal products - 30dB noise reduction in public/quiet areas
			Fabricated metal products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Fabricated metal products - 30dB noise reduction in public/quiet areas
				Professional scientific, and controlling instruments; photographic and optical goods; watches and clocks - 30dB noise reduction
		Miscellaneous manufacturing - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Miscellaneous manufacturing - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Miscellaneous manufacturing - 30dB noise reduction in public/quiet areas
	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>
		Railroad, rapid rail transit, and street railway transportation - max FAR of 0.28, no passenger terminals, 30dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - 30dB noise reduction in public/quiet areas
		Motor vehicle transportation - max FAR of 0.28, no passenger terminals, 30dB noise reduction in public/quiet areas	Motor vehicle transportation - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Motor vehicle transportation - 30dB noise reduction in public/quiet areas

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
75-79dB		Aircraft transportation - max FAR of 0.28, no passenger terminals, 30dB noise reduction in public/quiet areas	Aircraft transportation - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Aircraft transportation - 30dB noise reduction in public/quiet areas
		Marine craft transportation - max FAR of 0.28, no passenger terminals, 30dB noise reduction in public/quiet areas	Marine craft transportation - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Marine craft transportation - 30dB noise reduction in public/quiet areas
		Highway and street right-of-way	Highway and street right-of-way	Highway and street right-of-way
		Auto parking - max FAR of 0.28, no passenger terminals, 30dB noise reduction in public/quiet areas	Auto parking - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Auto parking - 30dB noise reduction in public/quiet areas
		Communication - max FAR of 0.28, no above ground transmission lines, 30dB noise reduction if project is noise sensitive	Communication - max FAR of 0.56, 30dB noise reduction if project is noise sensitive	Communication - 30dB noise reduction if project is noise sensitive
		Utilities - max FAR of 0.28, no above ground transmission lines, 30dB noise reduction in public/quiet areas	Utilities - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Utilities - 30dB noise reduction in public/quiet areas
				Solid waste disposal (landfills, incineration, etc.)

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
75-79dB		Other transport, comm. And utilities - max FAR of 0.28, no passenger terminals, no above ground transmission lines, 30dB noise reduction if project is noise sensitive	Other transport, comm, and utilities - max FAR of 0.56, 30dB noise reduction if project is noise sensitive	Other transport, comm, and utilities - 30dB noise reduction if project is noise sensitive
	Trade	Trade	Trade	Trade
		Wholesale trade - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Wholesale trade - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Wholesale trade - 30dB noise reduction in public/quiet areas
		Retail trade - building materials, hardware and farm equipment - max FAR of 0.12, 30dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - max FAR of 0.24, 30dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - 30dB noise reduction in public/quiet areas
			Retail trade - shopping centers, home improvement store, discount club, electronics superstore - max FAR of 0.16, 30dB noise reduction	Retail trade - shopping centers, home improvement store, discount club, electronics superstore - 30dB noise reduction
			Retail trade - food - max FAR of 0.24, 30dB noise reduction	Retail trade - food - 30dB noise reduction
		Retail trade - automotive, marine craft, aircraft and accessories - max FAR of 0.14, 30dB noise reduction	Retail trade - automotive, marine craft, aircraft and accessories - max FAR of 0.28, 30dB noise reduction	Retail trade - automotive, marine craft, aircraft and accessories - 30dB noise reduction
			Retail trade - apparel and accessories - max FAR of 0.28, 30dB noise reduction	Retail trade - apparel and accessories - 30dB noise reduction

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
75-79dB			Retail trade - furniture, home, furnishings and equipment - max FAR of 0.28, 30dB noise reduction	Retail trade - furniture, home, furnishings and equipment - 30dB noise reduction
				Retail trade - eating and drinking establishments - 30dB noise reduction
			Other retail trade - max FAR of 0.16, 30dB noise reduction	Other retail trade - 30dB noise reduction
	<u>Services</u>	<u>Services</u>	<u>Services</u>	<u>Services</u>
			Finance, insurance and real estate services - max FAR of 0.22, 30dB noise reduction	Finance, insurance and real estate services - 30dB noise reduction
			Personal services - max FAR of 0.22, office uses only, 30dB noise reduction	Personal services - 30dB noise reduction
		Cemeteries - no chapels, 30dB noise reduction in public/quiet areas	Cemeteries - no chapels, 30dB noise reduction in public/quiet areas	Cemeteries - 30dB noise reduction in public/quiet areas
			Business services (credit reporting; mail, stenographic, reproduction; advertising) - max FAR of 0.22, 30dB noise reduction	Business services (credit reporting; mail, stenographic, reproduction; advertising) - 30dB noise reduction
		Warehousing and storage - max FAR of 1.0, 30dB noise reduction in public/quiet areas	Warehousing and storage - max FAR of 2.0, 30dB noise reduction in public/quiet areas	Warehousing and storage - 30dB noise reduction in public/quiet areas

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
75-79dB		Repair services - max FAR of 0.11, 30dB noise reduction in public/quiet areas	Repair services - max FAR of 0.22, 30dB noise reduction in public/quiet areas	Repair services - 30dB noise reduction in public/quiet areas
			Professional services - max FAR of 0.22, 30dB noise reduction	Professional services - 30dB noise reduction
		Contract construction services - max FAR of 0.11, 30dB noise reduction	Contract construction services - max FAR of 0.22, 30dB noise reduction	Contract construction services - 30dB noise reduction
			Government services - max FAR of 0.24, 30dB noise reduction	Government services - 30dB noise reduction
			Miscellaneous services - max FAR of 0.22, 30dB noise reduction	Miscellaneous services - 30dB noise reduction
	<u>Cultural, entertainment and recreational</u>	<u>Cultural, entertainment and recreational</u>	<u>Cultural, entertainment and recreational</u>	<u>Cultural, entertainment and recreational</u>
		Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.11, low intensity (no tot lots, meetings places, etc), 30dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.22, low intensity (no tot lots, meetings places, etc), 30dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - 30dB noise reduction
	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>
	Agriculture (except livestock) - no above ground structures	Agriculture (except livestock) - no activities that attract concentration of birds, no residential	Agriculture (except livestock) - no activities that attract concentration of birds, no residential	Agriculture (except livestock) - no residential

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
75-79dB		Agriculture related activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential	Agriculture related activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential	Agriculture related activities - no residential
		Forestry activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no residential	Forestry activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no residential	Forestry activities - no residential
		Fishing activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Fishing activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Fishing activities
		Mining activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Mining activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Mining activities
		Other resource production or extraction - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Other resource production or extraction - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Other resource production or extraction
	<u>Other</u>	<u>Other</u>	<u>Other</u>	<u>Other</u>
	Vacant land	Vacant land	Vacant land	Vacant land

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
75-79dB	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>
	Fort Worth - north, south	Fort Worth - north, south	Fort Worth - north, south	Fort Worth
		Lake Worth	Lake Worth	Lake Worth
		White Settlement		Westworth Village
				White Settlement
80-84dB	<u>Manufacturing</u>	<u>Manufacturing</u>	<u>Manufacturing</u>	<u>Manufacturing</u>
			Food & kindred products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Food & kindred products - 35dB noise reduction in public/quiet areas
			Textile mill products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Textile mill products - 35dB noise reduction in public/quiet areas
				Apparel and other finished products; products made from fabrics, leather and similar materials - 35dB noise reduction in public/quiet areas
		Lumber and wood products (except furniture) - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - 35dB noise reduction in public/quiet areas
		Furniture and fixtures - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Furniture and fixtures - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Furniture and fixtures - 35dB noise reduction in public/quiet areas

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
80-84dB		Paper and allied products - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Paper and allied products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Paper and allied products - 35dB noise reduction in public/quiet areas
		Printing, publishing and allied industries - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Printing, publishing and allied industries - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Printing, publishing and allied industries - 35dB noise reduction in public/quiet areas
				Chemicals and allied products - 35dB noise reduction in public/quiet areas
				Petroleum and allied products - 35dB noise reduction in public/quiet areas
				Rubber and misc. plastic products - 35dB noise reduction in public/quiet areas
			Stone, clay and glass products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Stone, clay and glass products - 35dB noise reduction in public/quiet areas
			Primary metal products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Primary metal products - 35dB noise reduction in public/quiet areas
			Fabricated metal products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Fabricated metal products - 35dB noise reduction in public/quiet areas

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
80-84dB		Miscellaneous manufacturing - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Miscellaneous manufacturing - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Miscellaneous manufacturing - 35dB noise reduction in public/quiet areas
	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>	<u>Transportation, Communications & Utilities</u>
		Railroad, rapid rail transit, and street railway transportation - max FAR of 0.28, no passenger terminals, 35dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - 35dB noise reduction in public/quiet areas
		Motor vehicle transportation - max FAR of 0.28, no passenger terminals, 35dB noise reduction in public/quiet areas	Motor vehicle transportation - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Motor vehicle transportation - 35dB noise reduction in public/quiet areas
		Aircraft transportation - max FAR of 0.28, no passenger terminals, 35dB noise reduction in public/quiet areas	Aircraft transportation - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Aircraft transportation - 35dB noise reduction in public/quiet areas
		Marine craft transportation - max FAR of 0.28, no passenger terminals, 35dB noise reduction in public/quiet areas	Marine craft transportation - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Marine craft transportation - 35dB noise reduction in public/quiet areas
		Highway and street right-of-way	Highway and street right-of-way	Highway and street right-of-way
		Auto parking - max FAR of 0.28, no passenger terminals, 35dB noise reduction in public/quiet areas	Auto parking - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Auto parking - 35dB noise reduction in public/quiet areas

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
80-84dB		Utilities - max FAR of 0.28, no above ground transmission lines, 35dB noise reduction in public/quiet areas	Utilities - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Utilities - 35dB noise reduction in public/quiet areas
				Solid waste disposal (landfills, incineration, etc.)
	<u>Trade</u>	<u>Trade</u>	<u>Trade</u>	<u>Trade</u>
		Wholesale trade - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Wholesale trade - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Wholesale trade - 35dB noise reduction in public/quiet areas
		Retail trade - building materials, hardware and farm equipment - max FAR of 0.12, 35dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - max FAR of 0.24, 35dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - 35dB noise reduction in public/quiet areas
	<u>Services</u>	<u>Services</u>	<u>Services</u>	<u>Services</u>
		Cemeteries - no chapels, 35dB noise reduction in public/quiet areas, discouraged	Cemeteries - no chapels, 35dB noise reduction in public/quiet areas, discouraged	Cemeteries - 35dB noise reduction in public/quiet areas, discouraged
		Warehousing and storage - max FAR of 1.0, 35dB noise reduction in public/quiet areas	Warehousing and storage - max FAR of 2.0, 35dB noise reduction in public/quiet areas	Warehousing and storage - 35dB noise reduction in public/quiet areas
	Repair services - max FAR of 0.11, 35dB noise reduction in public/quiet areas	Repair services - max FAR of 0.22, 35dB noise reduction in public/quiet areas	Repair services - 35dB noise reduction in public/quiet areas	

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>
	Agriculture (except livestock) - no above ground structures	Agriculture (except livestock) - no activities that attract concentration of birds, no residential, discouraged	Agriculture (except livestock) - no activities that attract concentration of birds, no residential, discouraged	Agriculture (except livestock) - no residential, discouraged
		Agriculture related activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential, discouraged	Agriculture related activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential, discouraged	Agriculture related activities - no residential, discouraged
80-84dB		Forestry activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no residential, discouraged	Forestry activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no residential, discouraged	Forestry activities - no residential, discouraged
		Fishing activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Fishing activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Fishing activities
		Mining activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Mining activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Mining activities
		Other resource production or extraction - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Other resource production or extraction - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Other resource production or extraction

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
80-84dB	<u>Other</u>	<u>Other</u>	<u>Other</u>	<u>Other</u>
	Vacant land	Vacant land	Vacant land	Vacant land
	Cities with this Combination	Cities with this Combination	Cities with this Combination	Cities with this Combination
	Fort Worth - north	Fort Worth - north, south	None	Westworth Village
	White Settlement	Lake Worth		White Settlement
		White Settlement		
85+ dB	<u>Services</u>	<u>Services</u>	<u>Services</u>	<u>Services</u>
		Cemeteries - no buildings, discouraged	Cemeteries - no buildings, discouraged	Cemeteries - no buildings, discouraged
	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>	<u>Resource Production & Extraction</u>
	Agriculture (except livestock) - no above ground structures	Agriculture (except livestock) - no activities that attract concentration of birds, no residential, discouraged	Agriculture (except livestock) - no activities that attract concentration of birds, no residential, discouraged	Agriculture (except livestock) - no residential, discouraged
		Agriculture related activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential, discouraged	Agriculture related activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential, discouraged	Agriculture related activities - no residential, discouraged
		Forestry activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no residential, discouraged	Forestry activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no residential, discouraged	Forestry activities - no residential, discouraged

JOINING FORCES

NORTH TEXAS

Table 5

	Clear Zone	APZ I	APZ II	Outside Safety Zone
85+ dB		Fishing activities - max FAR of 0.28, no activity which produces smoke/glare/ involves explosives	Fishing activities - max FAR of 0.56, no activity which produces smoke/glare/ involves explosives	Fishing activities
		Mining activities - max FAR of 0.28, no activity which produces smoke/glare/ involves explosives	Mining activities - max FAR of 0.56, no activity which produces smoke/glare/ involves explosives	Mining activities
		Other resource production or extraction - max FAR of 0.28, no activity which produces smoke/glare/ involves explosives	Other resource production or extraction - max FAR of 0.56, no activity which produces smoke/glare/ involves explosives	Other resource production or extraction
	<u>Other</u>	<u>Other</u>	<u>Other</u>	<u>Other</u>
	Vacant land	Vacant land	Vacant land	Vacant land
	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>	<u>Cities with this Combination</u>
	None	None	None	Fort Worth
				White Settlement

JOINING FORCES

NORTH TEXAS

Table 6

Clear Zone	APZ I	APZ II	Outside Safety Zone
Residential	Residential	Residential	Residential
		Single units: detached - max density of 12 DU/Ac, 25dB noise reduction, discouraged	Single units: detached - 25dB noise reduction, discouraged
			Single units, semi-detached - 25dB noise reduction, discouraged
			Single units: attached row - 25dB noise reduction, discouraged
			Two units, side-by-side - 25dB noise reduction, discouraged
			Two units, one above the other - 25dB noise reduction, discouraged
			Apartments: walk-up - 25dB noise reduction, discouraged
			Apartment: elevator - 25dB noise reduction, discouraged
			Group quarters - 25dB noise reduction, discouraged
			Residential Hotels - 25dB noise reduction, discouraged
			Mobile home parks or courts - 25dB noise reduction, discouraged
			Transient lodgings - 25dB noise reduction, discouraged
			Other residential - 25dB noise reduction, discouraged
Manufacturing	Manufacturing	Manufacturing	Manufacturing
		Food & kindred products - max FAR of 0.56	Food & kindred products
		Textile mill products - max FAR of 0.56	Textile mill products
		Lumber and wood products (except furniture) - max FAR of 0.28	Lumber and wood products (except furniture)
	Furniture and fixtures - max FAR of 0.28	Furniture and fixtures - max FAR of 0.56	Furniture and fixtures
	Paper and allied products - max FAR of 0.28	Paper and allied products - max FAR of 0.56	Paper and allied products
	Printing, publishing and allied industries - max FAR of 0.28	Printing, publishing and allied industries - max FAR of 0.56	Printing, publishing and allied industries
			Chemicals and allied products
			Petroleum and allied products
			Rubber and misc. plastic products
		Stone, clay and glass products - max FAR of 0.56	Stone, clay and glass products
		Primary metal products - max FAR of 0.56	Primary metal products
		Fabricated metal products - max FAR of 0.56	Fabricated metal products
			Professional scientific, and controlling instruments; photographic and optical goods; watches and clocks
	Miscellaneous manufacturing - max FAR of 0.28	Miscellaneous manufacturing - max FAR of 0.56	Miscellaneous manufacturing
Transportation, Communications & Utilities	Transportation, Communications & Utilities	Transportation, Communications & Utilities	Transportation, Communications & Utilities
	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.28, no passenger terminals	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.56	Railroad, rapid rail transit, and street railway transportation
	Motor vehicle transportation - max FAR of 0.28, no passenger terminals	Motor vehicle transportation - max FAR of 0.56	Motor vehicle transportation
	Aircraft transportation - max FAR of 0.28, no passenger terminals	Aircraft transportation - max FAR of 0.56	Aircraft transportation
	Marine craft transportation - max FAR of 0.28, no passenger terminals	Marine craft transportation - max FAR of 0.56	Marine craft transportation
	Highway and street right-of-way	Highway and street right-of-way	Highway and street right-of-way
	Auto parking - max FAR of 0.28, no passenger terminals	Auto parking - max FAR of 0.56	Auto parking
	Communication - max FAR of 0.28, no above ground transmission lines	Communication - max FAR of 0.56	Communication
	Utilities - max FAR of 0.28, no above ground transmission lines	Utilities - max FAR of 0.56	Utilities
			Solid waste disposal (landfills, incineration, etc.)
	Other transport, comm. And utilities - max FAR of 0.28, no passenger terminals, no above ground	Other transport, comm, and utilities - max FAR of 0.56	Other transport, comm, and utilities

JOINING FORCES

NORTH TEXAS

Clear Zone	APZ I	APZ II	Outside Safety Zone
Trade	Trade	Trade	Trade
	Wholesale trade - max FAR of 0.28	Wholesale trade - max FAR of 0.56	Wholesale trade
	Retail trade - building materials, hardware and farm equipment - max FAR of 0.12	Retail trade - building materials, hardware and farm equipment - max FAR of 0.24	Retail trade - building materials, hardware and farm equipment
		Retail trade - shopping centers, home improvement store, discount club, electronics superstore - max FAR of 0.16	Retail trade - shopping centers, home improvement store, discount club, electronics superstore
		Retail trade - food - max FAR of 0.24	Retail trade - food
	Retail trade - automotive, marine craft, aircraft and accessories - max FAR of 0.34	Retail trade - automotive, marine craft, aircraft and accessories - max FAR of 0.28	Retail trade - automotive, marine craft, aircraft and accessories
		Retail trade - apparel and accessories - max FAR of 0.28	Retail trade - apparel and accessories
		Retail trade - furniture, home, furnishings and equipment - max FAR of 0.28	Retail trade - furniture, home, furnishings and equipment
			Retail trade - eating and drinking establishments
		Other retail trade - max FAR of 0.35	Other retail trade
Services	Services	Services	Services
		Finance, insurance and real estate services - max FAR of 0.22	Finance, insurance and real estate services
		Personal services - max FAR of 0.22, office uses only	Personal services
	Cemeteries - no chapels	Cemeteries - no chapels	Cemeteries
		Business services (credit reporting, mail, stenographic, reproduction, advertising) - max FAR of 0.22	Business services (credit reporting, mail, stenographic, reproduction, advertising)
	Warehousing and storage - max FAR of 1.0	Warehousing and storage - max FAR of 2.0	Warehousing and storage
	Repair services - max FAR of 0.11	Repair services - max FAR of 0.22	Repair services
		Professional services - max FAR of 0.22	Professional services
			Hospitals, other medical - 25dB noise reduction
			Nursing home - 25dB noise reduction, discouraged
	Contract construction services - max FAR of 0.11	Contract construction services - max FAR of 0.22	Contract construction services
		Government services - max FAR of 0.24, 25dB noise reduction	Government services - 25dB noise reduction
			Educational services - 25dB noise reduction
		Miscellaneous services - max FAR of 0.22	Miscellaneous services
Cultural, entertainment and recreational	Cultural, entertainment and recreational	Cultural, entertainment and recreational	Cultural, entertainment and recreational
			Cultural activities and churches - 25dB noise reduction
	Nature exhibits - low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Nature exhibits - low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Nature exhibits - 25dB noise reduction
			Public assembly
			Auditoriums, concert halls - 25dB noise reduction
			Outdoor sports arenas, spectator sports - 25dB noise reduction
		Amusements - fairgrounds, miniature golf, driving ranges, amusement parks, etc.	Amusements - fairgrounds, miniature golf, driving ranges, amusement parks, etc.
	Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.11, low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.22, low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - 25dB noise reduction
			Resorts and group camps - 25dB noise reduction
	Parks - max FAR of 0.11, low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Parks - max FAR of 0.22, low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Parks - 25dB noise reduction
	Other cultural, entertainment and recreation - max FAR of 0.11, no chapels, 25dB noise reduction	Other cultural, entertainment and recreation - max FAR of 0.22, no chapels, 25dB noise reduction	Other cultural, entertainment and recreation - 25dB noise reduction

JOINING FORCES

NORTH TEXAS

	Clear Zone	APZ I	APZ II	Outside Safety Zone
	Resource Production & Extraction	Resource Production & Extraction	Resource Production & Extraction	Resource Production & Extraction
	Agriculture (except livestock) - no above ground structures	Agriculture (except livestock) - no activities that attract concentration of birds, no residential buildings	Agriculture (except livestock) - no activities that attract concentration of birds, residential buildings 25dB noise reduction	Agriculture (except livestock) - residential buildings 25dB noise reduction
		Livestock farming and breeding - no activities that attract concentration of birds, no residential buildings	Livestock farming and breeding - no activities that attract concentration of birds, residential buildings 25dB noise reduction	Livestock farming and breeding - residential buildings 25dB noise reduction
		Agriculture related activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential buildings	Agriculture related activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, residential buildings 25dB noise reduction	Agriculture related activities - residential buildings 25dB noise reduction
		Forestry activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no residential buildings	Forestry activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, residential buildings 25dB noise reduction	Forestry activities - residential buildings 25dB noise reduction
		Fishing activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Fishing activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Fishing activities
		Mining activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Mining activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Mining activities
		Other resource production or extraction max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Other resource production or extraction max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Other resource production or extraction
	Other	Other	Other	Other
	Vacant land	Vacant land	Vacant land	Vacant land
	Cities with this Combination	Cities with this Combination	Cities with this Combination	Cities with this Combination
	None	Fort Worth - north	Fort Worth - north, south Lake Worth	Benbrook Fort Worth Lake Worth Westworth Village White Settlement
65-69dB	Residential	Residential	Residential	Residential
			Single units: detached - max density of 12 DU/Ac, 30dB noise reduction, discouraged	Single units: detached - 30dB noise reduction, discouraged
				Single units, semi-detached - 30dB noise reduction, discouraged
				Single units: attached row - 30dB noise reduction, discouraged
				Two units, side-by-side - 30dB noise reduction, discouraged
				Two units, one above the other - 30dB noise reduction, discouraged
				Apartments: walk up - 30dB noise reduction, discouraged
				Apartment: elevator - 30dB noise reduction, discouraged
				Group quarters - 30dB noise reduction, discouraged
				Residential Hotels - 30dB noise reduction, discouraged
				Mobile home parks or courts - 30dB noise reduction, discouraged
				Transient lodgings - 30dB noise reduction, discouraged
				Other residential - 30dB noise reduction, discouraged
	Manufacturing	Manufacturing	Manufacturing	Manufacturing
			Food & kindred products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Food & kindred products - 25dB noise reduction in public/quiet areas
			Textile mill products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Textile mill products - 25dB noise reduction in public/quiet areas
				Apparel and other finished products; products made from fabrics, leather and similar materials - 25dB noise reduction in public/quiet areas
		Lumber and wood products (except furniture) - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - 25dB noise reduction in public/quiet areas
70-74dB				

JOINING FORCES

NORTH TEXAS

Clear Zone	APZ I	APZ II	Outside Safety Zone
Manufacturing	Manufacturing	Manufacturing	Manufacturing
	Furniture and fixtures - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Furniture and fixtures - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Furniture and fixtures - 25dB noise reduction in public/quiet areas
	Paper and allied products - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Paper and allied products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Paper and allied products - 25dB noise reduction in public/quiet areas
	Printing, publishing and allied industries - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Printing, publishing and allied industries - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Printing, publishing and allied industries - 25dB noise reduction in public/quiet areas
			Chemicals and allied products - 25dB noise reduction in public/quiet areas
			Petroleum and allied products - 25dB noise reduction in public/quiet areas
			Rubber and misc. plastic products - 25dB noise reduction in public/quiet areas
		Stone, clay and glass products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Stone, clay and glass products - 25dB noise reduction in public/quiet areas
		Primary metal products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Primary metal products - 25dB noise reduction in public/quiet areas
		Fabricated metal products - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Fabricated metal products - 25dB noise reduction in public/quiet areas
			Professional scientific, and controlling instruments; photographic and optical goods; watches and clocks - 25dB noise reduction
	Miscellaneous manufacturing - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Miscellaneous manufacturing - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Miscellaneous manufacturing - 25dB noise reduction in public/quiet areas
Transportation, Communications & Utilities	Transportation, Communications & Utilities	Transportation, Communications & Utilities	Transportation, Communications & Utilities
	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.28, no passenger terminals, 25dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - 25dB noise reduction in public/quiet areas
	Motor vehicle transportation - max FAR of 0.28, no passenger terminals, 25dB noise reduction in public/quiet areas	Motor vehicle transportation - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Motor vehicle transportation - 25dB noise reduction in public/quiet areas
	Aircraft transportation - max FAR of 0.28, no passenger terminals, 25dB noise reduction in public/quiet areas	Aircraft transportation - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Aircraft transportation - 25dB noise reduction in public/quiet areas
	Marine craft transportation - max FAR of 0.28, no passenger terminals, 25dB noise reduction in public/quiet areas	Marine craft transportation - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Marine craft transportation - 25dB noise reduction in public/quiet areas
	Highway and street right-of-way	Highway and street right-of-way	Highway and street right-of-way
	Auto parking - max FAR of 0.28, no passenger terminals, 25dB noise reduction in public/quiet areas	Auto parking - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Auto parking - 25dB noise reduction in public/quiet areas
	Communication - max FAR of 0.28, no above ground transmission lines, 25dB noise reduction if project is noise sensitive	Communication - max FAR of 0.56, 25dB noise reduction if project is noise sensitive	Communication - 25dB noise reduction if project is noise sensitive
	Utilities - max FAR of 0.28, no above ground transmission lines, 25dB noise reduction in public/quiet areas	Utilities - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Utilities - 25dB noise reduction in public/quiet areas
			Solid waste disposal (landfills, incineration, etc.)
	Other transport, comm. and utilities - max FAR of 0.28, no passenger terminals, no above ground transmission lines, 25dB noise reduction if project is noise sensitive	Other transport, comm. and utilities - max FAR of 0.56, 25dB noise reduction if project is noise sensitive	Other transport, comm. and utilities - 25dB noise reduction if project is noise sensitive

JOINING FORCES

NORTH TEXAS

Clear Zone	AP2 I	AP2 II	Outside Safety Zone
Trade	Trade	Trade	Trade
	Wholesale trade - max FAR of 0.28, 25dB noise reduction in public/quiet areas	Wholesale trade - max FAR of 0.56, 25dB noise reduction in public/quiet areas	Wholesale trade - 25dB noise reduction in public/quiet areas
	Retail trade - building materials, hardware and farm equipment - max FAR of 0.12, 25dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - max FAR of 0.24, 25dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - 25dB noise reduction in public/quiet areas
		Retail trade - shopping centers, home improvement store, discount club, electronics superstore - max FAR of 0.16, 25dB noise reduction	Retail trade - shopping centers, home improvement store, discount club, electronics superstore - 25dB noise reduction
		Retail trade - food - max FAR of 0.24, 25dB noise reduction	Retail trade - food - 25dB noise reduction
	Retail trade - automotive, marine craft, aircraft and accessories - max FAR of 0.14, 25dB noise reduction	Retail trade - automotive, marine craft, aircraft and accessories - max FAR of 0.28, 25dB noise reduction	Retail trade - automotive, marine craft, aircraft and accessories - 25dB noise reduction
		Retail trade - apparel and accessories - max FAR of 0.28, 25dB noise reduction	Retail trade - apparel and accessories - 25dB noise reduction
		Retail trade - furniture, home, furnishings and equipment - max FAR of 0.28, 25dB noise reduction	Retail trade - furniture, home, furnishings and equipment - 25dB noise reduction
			Retail trade - eating and drinking establishments - 25dB noise reduction
		Other retail trade - max FAR of 0.16, 25dB noise reduction	Other retail trade - 25dB noise reduction
Services	Services	Services	Services
		Finance, insurance and real estate services - max FAR of 0.22, 25dB noise reduction	Finance, insurance and real estate services - 25dB noise reduction
		Personal services - max FAR of 0.22, office uses only, 25dB noise reduction	Personal services - 25dB noise reduction
	Cemeteries - no chapels, 25dB noise reduction in public/quiet areas	Cemeteries - no chapels, 25dB noise reduction in public/quiet areas	Cemeteries - 25dB noise reduction in public/quiet areas
		Business services (credit reporting; mail, stenographic, reproduction; advertising) - max FAR of 0.22, 25dB noise reduction	Business services (credit reporting; mail, stenographic, reproduction; advertising) - 25dB noise reduction
	Warehousing and storage - max FAR of 1.0, 25dB noise reduction in public/quiet areas	Warehousing and storage - max FAR of 2.0, 25dB noise reduction in public/quiet areas	Warehousing and storage - 25dB noise reduction in public/quiet areas
	Repair services - max FAR of 0.11, 25dB noise reduction in public/quiet areas	Repair services - max FAR of 0.22, 25dB noise reduction in public/quiet areas	Repair services - 25dB noise reduction in public/quiet areas
		Professional services - max FAR of 0.22, 25dB noise reduction	Professional services - 25dB noise reduction
			Hospitals, other medical - 30dB noise reduction
			Nursing home - 30dB noise reduction, discouraged
	Contact construction services - max FAR of 0.11, 25dB noise reduction	Contact construction services - max FAR of 0.22, 25dB noise reduction	Contact construction services - 25dB noise reduction
		Government services - max FAR of 0.24, 25dB noise reduction	Government services - 25dB noise reduction
			Educational services - 30dB noise reduction
		Miscellaneous services - max FAR of 0.22, 25dB noise reduction	Miscellaneous services - 25dB noise reduction
Cultural, entertainment and recreational	Cultural, entertainment and recreational	Cultural, entertainment and recreational	Cultural, entertainment and recreational
			Cultural activities and churches - 30dB noise reduction
			Auditoriums, concert halls - 30dB noise reduction
			Outdoor sports arenas, spectator sports - special sound reinforcement system
		Amusements - fairgrounds, miniature golf, driving ranges, amusement parks, etc.	Amusements - fairgrounds, miniature golf, driving ranges, amusement parks, etc.
	Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.11, low intensity (no tot lots, meetings places, etc), 25dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.22, low intensity (no tot lots, meetings places, etc), 25dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - 25dB noise reduction
			Resorts and group camps - 25dB noise reduction
	Parks - max FAR of 0.11, low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Parks - max FAR of 0.22, low intensity (no tot lots, meeting places, etc), 25dB noise reduction	Parks - 25dB noise reduction
	Other cultural, entertainment and recreation - max FAR of 0.11, no chapels, 25dB noise reduction	Other cultural, entertainment and recreation - max FAR of 0.22, no chapels, 25dB noise reduction	Other cultural, entertainment and recreation - 25dB noise reduction

JOINING FORCES

NORTH TEXAS

Clear Zone Resource Production & Extraction	AP2 I Resource Production & Extraction	AP2 II Resource Production & Extraction	Outside Safety Zone Resource Production & Extraction
Agriculture (except livestock) - no above ground structures	Agriculture (except livestock) - no activities that attract concentration of birds, no residential buildings	Agriculture (except livestock) - no activities that attract concentration of birds, residential buildings 30dB noise reduction	Agriculture (except livestock) - residential buildings 30dB noise reduction
	Livestock farming and breeding - no activities that attract concentration of birds, no residential buildings	Livestock farming and breeding - no activities that attract concentration of birds, residential buildings 30dB noise reduction	Livestock farming and breeding - residential buildings 30dB noise reduction
	Agriculture related activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential buildings	Agriculture related activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, residential buildings 30dB noise reduction	Agriculture related activities - residential buildings 30dB noise reduction
	Forestry activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no residential buildings	Forestry activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, residential buildings 30dB noise reduction	Forestry activities - residential buildings 30dB noise reduction
	Fishing activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Fishing activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Fishing activities
	Mining activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Mining activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Mining activities
	Other resource production or extraction - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Other resource production or extraction - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Other resource production or extraction
Other	Other	Other	Other
Vacant land	Vacant land	Vacant land	Vacant land
Cities with this Combination	Cities with this Combination	Cities with this Combination	Cities with this Combination
None	Fort Worth - north, south	Fort Worth - north, south	Fort Worth
	Lake Worth	Lake Worth	Lake Worth
	White Settlement		Westworth Village
			White Settlement
76-74dB	Residential	Residential	Residential
			Transient lodgings - 35dB noise reduction, discouraged
	Manufacturing	Manufacturing	Manufacturing
		Food & kindred products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Food & kindred products - 30dB noise reduction in public/quiet areas
		Textile mill products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Textile mill products - 30dB noise reduction in public/quiet areas
			Apparel and other finished products; products made from fabrics, leather and similar materials - 30dB noise reduction in public/quiet areas
	Lumber and wood products (except furniture) - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - 30dB noise reduction in public/quiet areas
	Furniture and fixtures - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Furniture and fixtures - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Furniture and fixtures - 30dB noise reduction in public/quiet areas
	Paper and allied products - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Paper and allied products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Paper and allied products - 30dB noise reduction in public/quiet areas
	Printing, publishing and allied industries - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Printing, publishing and allied industries - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Printing, publishing and allied industries - 30dB noise reduction in public/quiet areas
			Chemicals and allied products - 30dB noise reduction in public/quiet areas
			Petroleum and allied products - 30dB noise reduction in public/quiet areas
			Rubber and misc. plastic products - 30dB noise reduction in public/quiet areas
		Stone, clay and glass products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Stone, clay and glass products - 30dB noise reduction in public/quiet areas
		Primary metal products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Primary metal products - 30dB noise reduction in public/quiet areas
		Fabricated metal products - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Fabricated metal products - 30dB noise reduction in public/quiet areas
75-79dB			

JOINING FORCES

NORTH TEXAS

Clear Zone	APZ I	APZ II	Outside Safety Zone
Manufacturing	Manufacturing	Manufacturing	Manufacturing
			Professional scientific, and controlling instruments; photographic and optical goods; watches and clocks - 30dB noise reduction
	Miscellaneous manufacturing - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Miscellaneous manufacturing - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Miscellaneous manufacturing - 30dB noise reduction in public/quiet areas
Transportation, Communications & Utilities	Transportation, Communications & Utilities	Transportation, Communications & Utilities	Transportation, Communications & Utilities
	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.28, no passenger terminals, 30dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - 30dB noise reduction in public/quiet areas
	Motor vehicle transportation - max FAR of 0.28, no passenger terminals, 30dB noise reduction in public/quiet areas	Motor vehicle transportation - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Motor vehicle transportation - 30dB noise reduction in public/quiet areas
	Aircraft transportation - max FAR of 0.28, no passenger terminals, 30dB noise reduction in public/quiet areas	Aircraft transportation - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Aircraft transportation - 30dB noise reduction in public/quiet areas
	Marine craft transportation - max FAR of 0.28, no passenger terminals, 30dB noise reduction in public/quiet areas	Marine craft transportation - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Marine craft transportation - 30dB noise reduction in public/quiet areas
	Highway and street right-of-way	Highway and street right-of-way	Highway and street right-of-way
	Auto parking - max FAR of 0.28, no passenger terminals, 30dB noise reduction in public/quiet areas	Auto parking - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Auto parking - 30dB noise reduction in public/quiet areas
	Communication - max FAR of 0.28, no above ground transmission lines, 30dB noise reduction if project is noise sensitive	Communication - max FAR of 0.56, 30dB noise reduction if project is noise sensitive	Communication - 30dB noise reduction if project is noise sensitive
	Utilities - max FAR of 0.28, no above ground transmission lines, 30dB noise reduction in public/quiet areas	Utilities - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Utilities - 30dB noise reduction in public/quiet areas
			Solid waste disposal (landfills, incineration, etc.)
	Other transport, comm. and utilities - max FAR of 0.28, no passenger terminals, no above ground transmission lines, 30dB noise reduction if project is noise sensitive	Other transport, comm. and utilities - max FAR of 0.56, 30dB noise reduction if project is noise sensitive	Other transport, comm. and utilities - 30dB noise reduction if project is noise sensitive
Trade	Trade	Trade	Trade
	Wholesale trade - max FAR of 0.28, 30dB noise reduction in public/quiet areas	Wholesale trade - max FAR of 0.56, 30dB noise reduction in public/quiet areas	Wholesale trade - 30dB noise reduction in public/quiet areas
	Retail trade - building materials, hardware and farm equipment - max FAR of 0.12, 30dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - max FAR of 0.24, 30dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - 30dB noise reduction in public/quiet areas
		Retail trade - shopping centers, home improvement store, discount club, electronics superstore - max FAR of 0.16, 30dB noise reduction	Retail trade - shopping centers, home improvement store, discount club, electronics superstore - 30dB noise reduction
		Retail trade - food - max FAR of 0.24, 30dB noise reduction	Retail trade - food - 30dB noise reduction
	Retail trade - automotive, marine craft, aircraft and accessories - max FAR of 0.14, 30dB noise reduction	Retail trade - automotive, marine craft, aircraft and accessories - max FAR of 0.28, 30dB noise reduction	Retail trade - automotive, marine craft, aircraft and accessories - 30dB noise reduction
		Retail trade - apparel and accessories - max FAR of 0.28, 30dB noise reduction	Retail trade - apparel and accessories - 30dB noise reduction
		Retail trade - furniture, home furnishings and equipment - max FAR of 0.28, 30dB noise reduction	Retail trade - furniture, home furnishings and equipment - 30dB noise reduction
			Retail trade - eating and drinking establishments - 30dB noise reduction
		Other retail trade - max FAR of 0.16, 30dB noise reduction	Other retail trade - 30dB noise reduction
Services	Services	Services	Services
		Finance, insurance and real estate services - max FAR of 0.22, 30dB noise reduction	Finance, insurance and real estate services - 30dB noise reduction
		Personal services - max FAR of 0.22, office uses only, 30dB noise reduction	Personal services - 30dB noise reduction
	Cemeteries - no chapels, 30dB noise reduction in public/quiet areas	Cemeteries - no chapels, 30dB noise reduction in public/quiet areas	Cemeteries - 30dB noise reduction in public/quiet areas

JOINING FORCES

NORTH TEXAS

	APZ I	APZ II	Outside Safety Zone
Clear Zone	APZ I	APZ II	Outside Safety Zone
Services	Services	Services	Services
		Business services (credit reporting, mail, stenographic, reproduction; advertising) - max FAR of 0.22, 30dB noise reduction	Business services (credit reporting; mail, stenographic, reproduction; advertising) - 30dB noise reduction
	Warehousing and storage - max FAR of 1.0, 30dB noise reduction in public/quiet areas	Warehousing and storage - max FAR of 2.0, 30dB noise reduction in public/quiet areas	Warehousing and storage - 30dB noise reduction in public/quiet areas
	Repair services - max FAR of 0.11, 30dB noise reduction in public/quiet areas	Repair services - max FAR of 0.22, 30dB noise reduction in public/quiet areas	Repair services - 30dB noise reduction in public/quiet areas
	Professional services - max FAR of 0.22, 30dB noise reduction	Professional services - max FAR of 0.22, 30dB noise reduction	Professional services - 30dB noise reduction
	Contract construction services - max FAR of 0.11, 30dB noise reduction	Contract construction services - max FAR of 0.22, 30dB noise reduction	Contract construction services - 30dB noise reduction
		Government services - max FAR of 0.24, 30dB noise reduction	Government services - 30dB noise reduction
		Miscellaneous services - max FAR of 0.22, 30dB noise reduction	Miscellaneous services - 30dB noise reduction
Cultural, entertainment and recreational	Cultural, entertainment and recreational	Cultural, entertainment and recreational	Cultural, entertainment and recreational
	Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.11, low intensity (no tot lots, meetings places, etc), 30dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - max FAR of 0.22, low intensity (no tot lots, meetings places, etc), 30dB noise reduction	Recreational activities (including golf courses, riding stables, water recreation) - 30dB noise reduction
Resource Production & Extraction	Resource Production & Extraction	Resource Production & Extraction	Resource Production & Extraction
Agriculture (except livestock) - no above ground structures	Agriculture (except livestock) - no activities that attract concentration of birds, no residential	Agriculture (except livestock) - no activities that attract concentration of birds, no residential	Agriculture (except livestock) - no residential
	Agriculture related activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential	Agriculture related activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential	Agriculture related activities - no residential
	Forestry activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no residential	Forestry activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no residential	Forestry activities - no residential
	Fishing activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Fishing activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Fishing activities
	Mining activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Mining activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Mining activities
	Other resource production or extraction max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Other resource production or extraction max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Other resource production or extraction
Other	Other	Other	Other
Vacant land	Vacant land	Vacant land	Vacant land
Cities with this Combination	Cities with this Combination	Cities with this Combination	Cities with this Combination
Fort Worth - north, south	Fort Worth - north, south	Fort Worth - north, south	Fort Worth
	Lake Worth	Lake Worth	Lake Worth
	White Settlement		Westworth Village
			White Settlement
75-79dB	Manufacturing	Manufacturing	Manufacturing
		Food & kindred products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Food & kindred products - 35dB noise reduction in public/quiet areas
		Textile mill products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Textile mill products - 35dB noise reduction in public/quiet areas
			Apparel and other finished products; products made from fabrics, leather and similar materials - 35dB noise reduction in public/quiet areas
	Lumber and wood products (except furniture) - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Lumber and wood products (except furniture) - 35dB noise reduction in public/quiet areas
	Furniture and fixtures - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Furniture and fixtures - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Furniture and fixtures - 35dB noise reduction in public/quiet areas
	Paper and allied products - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Paper and allied products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Paper and allied products - 35dB noise reduction in public/quiet areas
	Printing, publishing and allied industries - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Printing, publishing and allied industries - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Printing, publishing and allied industries - 35dB noise reduction in public/quiet areas
80-84dB			

JOINING FORCES

NORTH TEXAS

Clear Zone	APZ I	APZ II	Outside Safety Zone
Manufacturing	Manufacturing	Manufacturing	Manufacturing
			Chemicals and allied products - 35dB noise reduction in public/quiet areas
			Petroleum and allied products - 35dB noise reduction in public/quiet areas
			Rubber and misc. plastic products - 35dB noise reduction in public/quiet areas
		Stone, clay and glass products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Stone, clay and glass products - 35dB noise reduction in public/quiet areas
		Primary metal products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Primary metal products - 35dB noise reduction in public/quiet areas
		Fabricated metal products - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Fabricated metal products - 35dB noise reduction in public/quiet areas
	Miscellaneous manufacturing - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Miscellaneous manufacturing - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Miscellaneous manufacturing - 35dB noise reduction in public/quiet areas
Transportation, Communications & Utilities	Transportation, Communications & Utilities	Transportation, Communications & Utilities	Transportation, Communications & Utilities
	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.28, no passenger terminals, 35dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Railroad, rapid rail transit, and street railway transportation - 35dB noise reduction in public/quiet areas
	Motor vehicle transportation - max FAR of 0.28, no passenger terminals, 35dB noise reduction in public/quiet areas	Motor vehicle transportation - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Motor vehicle transportation - 35dB noise reduction in public/quiet areas
	Aircraft transportation - max FAR of 0.28, no passenger terminals, 35dB noise reduction in public/quiet areas	Aircraft transportation - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Aircraft transportation - 35dB noise reduction in public/quiet areas
	Marine craft transportation - max FAR of 0.28, no passenger terminals, 35dB noise reduction in public/quiet areas	Marine craft transportation - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Marine craft transportation - 35dB noise reduction in public/quiet areas
	Highway and street right of way	Highway and street right of way	Highway and street right of way
	Auto parking - max FAR of 0.28, no passenger terminals, 35dB noise reduction in public/quiet areas	Auto parking - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Auto parking - 35dB noise reduction in public/quiet areas
	Utilities - max FAR of 0.28, no above ground transmission lines, 35dB noise reduction in public/quiet areas	Utilities - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Utilities - 35dB noise reduction in public/quiet areas
			Solid waste disposal (landfills, incineration, etc.)
Trade	Trade	Trade	Trade
	Wholesale trade - max FAR of 0.28, 35dB noise reduction in public/quiet areas	Wholesale trade - max FAR of 0.56, 35dB noise reduction in public/quiet areas	Wholesale trade - 35dB noise reduction in public/quiet areas
	Retail trade - building materials, hardware and farm equipment - max FAR of 0.12, 35dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - max FAR of 0.24, 35dB noise reduction in public/quiet areas	Retail trade - building materials, hardware and farm equipment - 35dB noise reduction in public/quiet areas
Services	Services	Services	Services
	Cemeteries - no chapels, 35dB noise reduction in public/quiet areas, discouraged	Cemeteries - no chapels, 35dB noise reduction in public/quiet areas, discouraged	Cemeteries - 35dB noise reduction in public/quiet areas, discouraged
	Warehousing and storage - max FAR of 1.0, 35dB noise reduction in public/quiet areas	Warehousing and storage - max FAR of 2.0, 35dB noise reduction in public/quiet areas	Warehousing and storage - 35dB noise reduction in public/quiet areas
	Repair services - max FAR of 0.11, 35dB noise reduction in public/quiet areas	Repair services - max FAR of 0.22, 35dB noise reduction in public/quiet areas	Repair services - 35dB noise reduction in public/quiet areas
Resource Production & Extraction	Resource Production & Extraction	Resource Production & Extraction	Resource Production & Extraction
Agriculture (except livestock) - no above ground structures	Agriculture (except livestock) - no activities that attract concentration of birds, no residential, discouraged	Agriculture (except livestock) - no activities that attract concentration of birds, no residential, discouraged	Agriculture (except livestock) - no residential, discouraged
	Agriculture related activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential, discouraged	Agriculture related activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential, discouraged	Agriculture related activities - no residential, discouraged
	Forestry activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no residential, discouraged	Forestry activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no residential, discouraged	Forestry activities - no residential, discouraged

JOINING FORCES

NORTH TEXAS

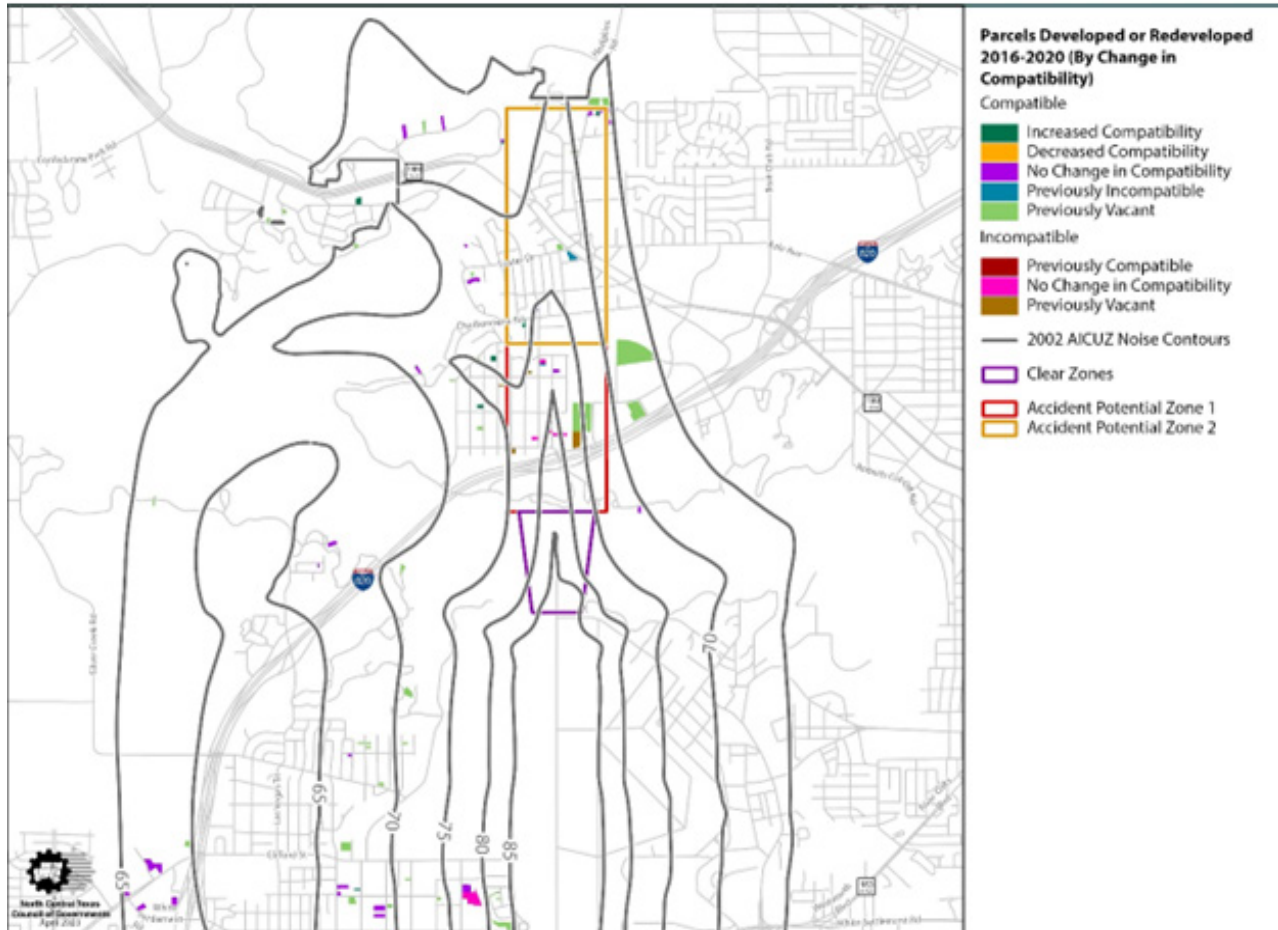
	Clear Zone	APZ I	APZ II	Outside Safety Zone
	Resource Production & Extraction	Resource Production & Extraction	Resource Production & Extraction	Resource Production & Extraction
		Fishing activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Fishing activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Fishing activities
		Mining activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Mining activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Mining activities
		Other resource production or extraction max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Other resource production or extraction max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Other resource production or extraction
	Other	Other	Other	Other
	Vacant land	Vacant land	Vacant land	Vacant land
	Cities with this Combination	Cities with this Combination	Cities with this Combination	Cities with this Combination
	Fort Worth - north	Fort Worth - north, south	None	Westworth Village
	White Settlement	Lake Worth		White Settlement
		White Settlement		
80-84dB	Services	Services	Services	Services
		Cemeteries - no buildings, discouraged	Cemeteries - no buildings, discouraged	Cemeteries - no buildings, discouraged
	Resource Production & Extraction	Resource Production & Extraction	Resource Production & Extraction	Resource Production & Extraction
	Agriculture (except livestock) - no above ground structures	Agriculture (except livestock) - no activities that attract concentration of birds, no residential, discouraged	Agriculture (except livestock) - no activities that attract concentration of birds, no residential, discouraged	Agriculture (except livestock) - no residential, discouraged
		Agriculture related activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential, discouraged	Agriculture related activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no activities that attract concentration of birds, no residential, discouraged	Agriculture related activities - no residential, discouraged
		Forestry activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives, no residential, discouraged	Forestry activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives, no residential, discouraged	Forestry activities - no residential, discouraged
		Fishing activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Fishing activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Fishing activities
		Mining activities - max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Mining activities - max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Mining activities
		Other resource production or extraction max FAR of 0.28, no activity which produces smoke/glare/involves explosives	Other resource production or extraction max FAR of 0.56, no activity which produces smoke/glare/involves explosives	Other resource production or extraction
	Other	Other	Other	Other
	Vacant land	Vacant land	Vacant land	Vacant land
	Cities with this Combination	Cities with this Combination	Cities with this Combination	Cities with this Combination
	None	None	None	Fort Worth
				White Settlement
85+ dB				

JOINING FORCES

NORTH TEXAS

Figure 17

Change in Compatibility 2016-2020 (North)

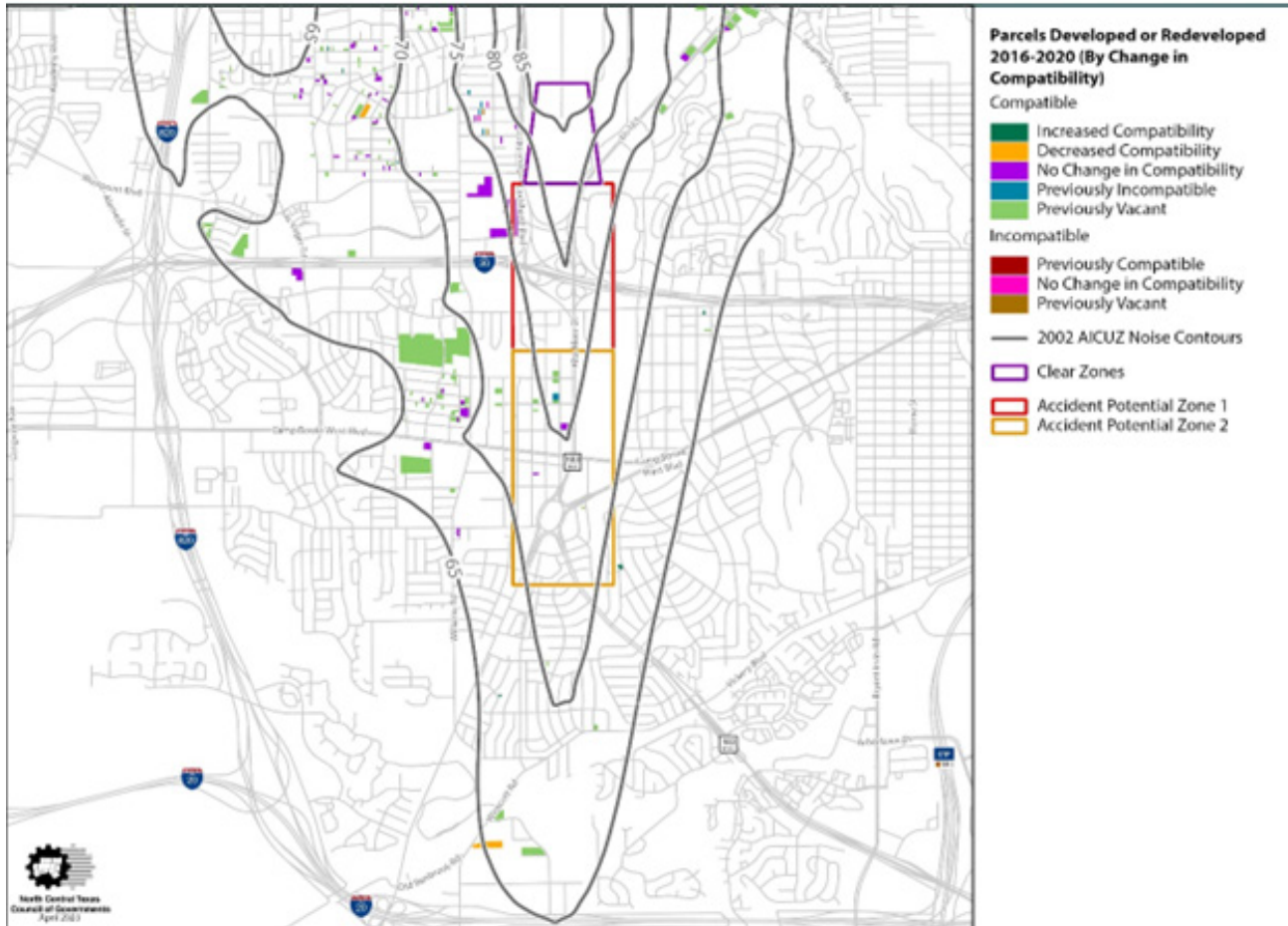


JOINING FORCES

NORTH TEXAS

Figure 18

Change in Compatibility 2016-2020 (South)

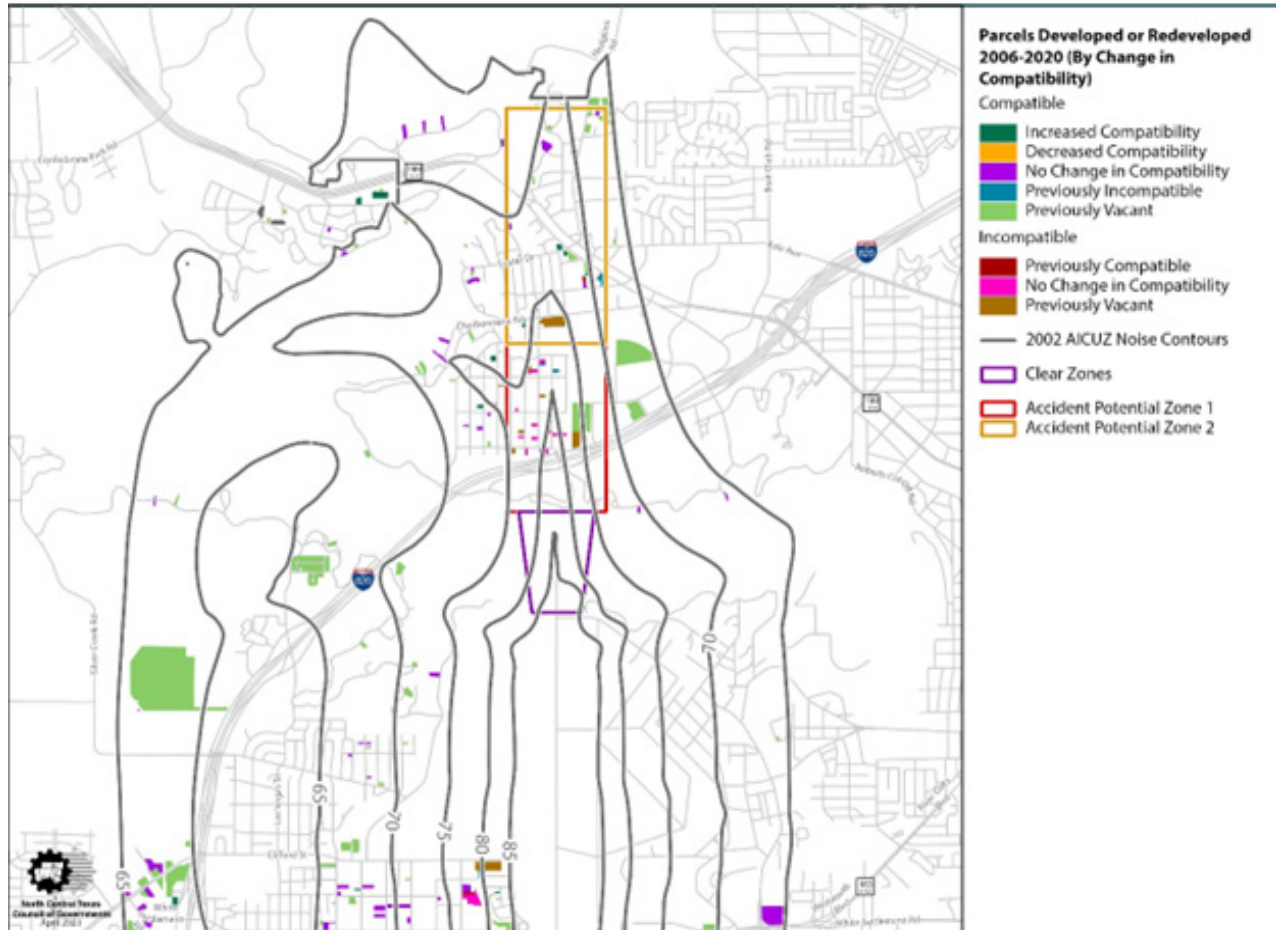


JOINING FORCES

NORTH TEXAS

Figure 19

Change in Compatibility 2006-2020 (North)

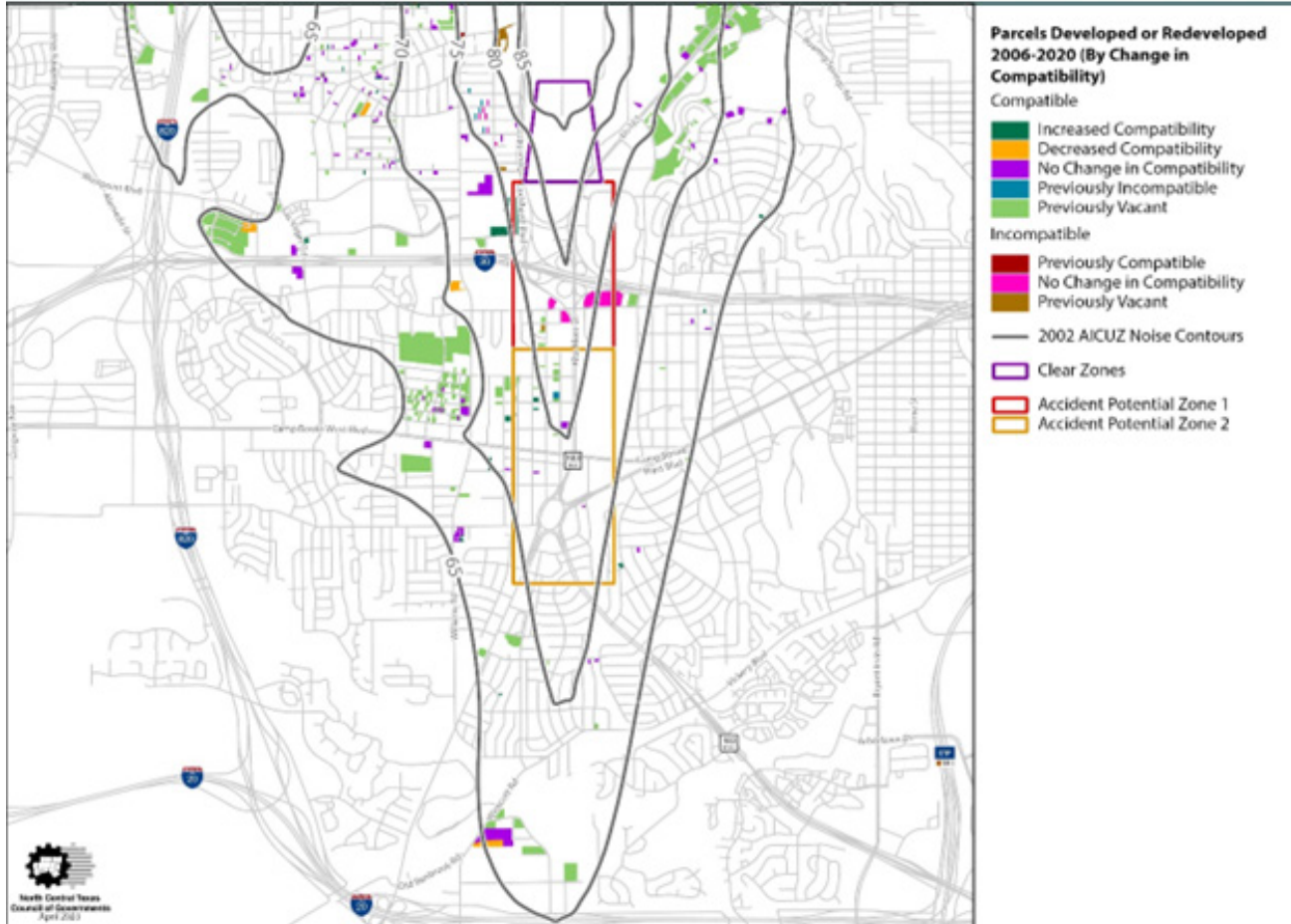


JOINING FORCES

NORTH TEXAS

Figure 20

Change in Compatibility 2006-2020 (South)

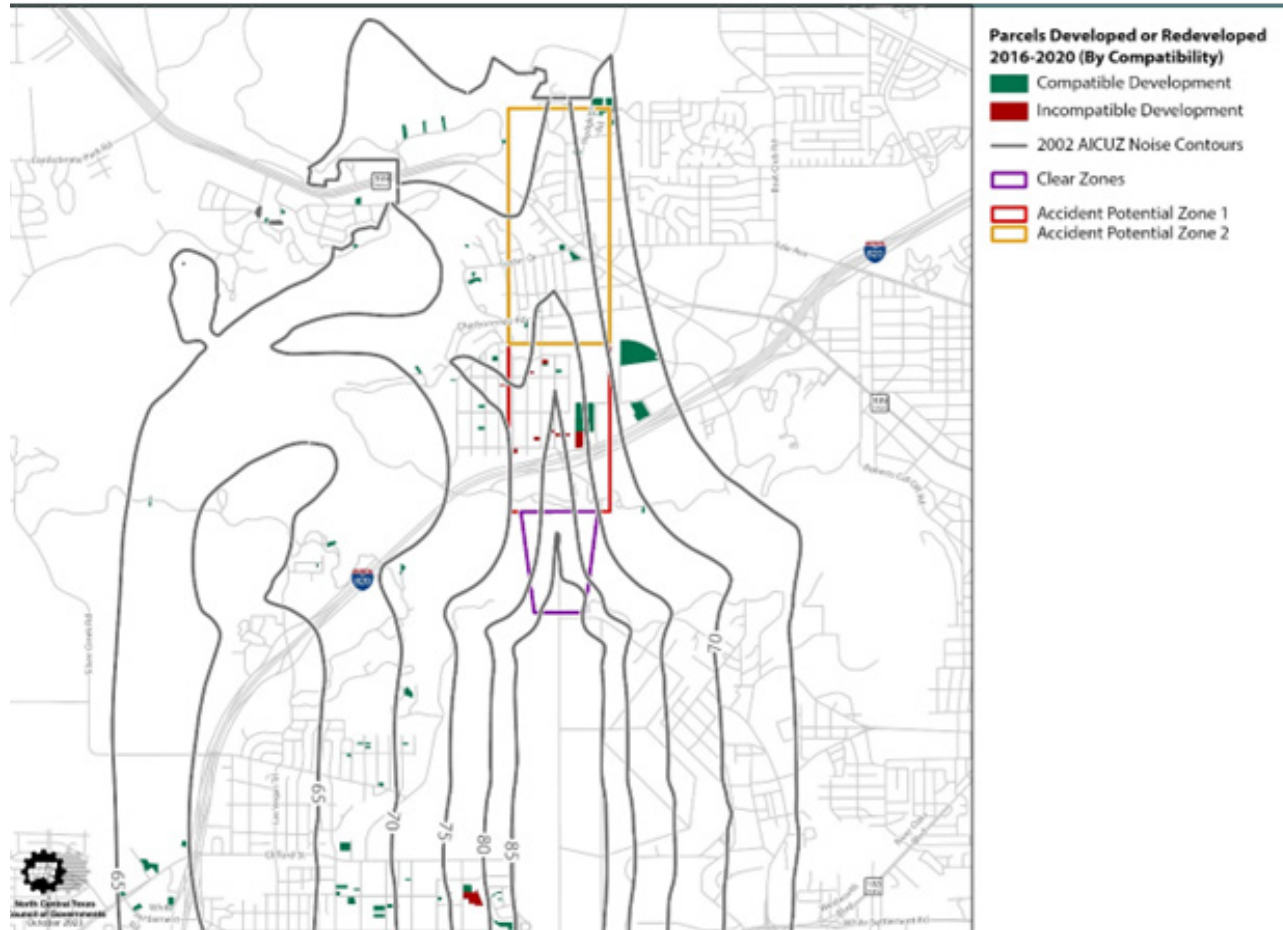


JOINING FORCES

NORTH TEXAS

Figure 21

Change in Compatibility 2016-2020 (North)

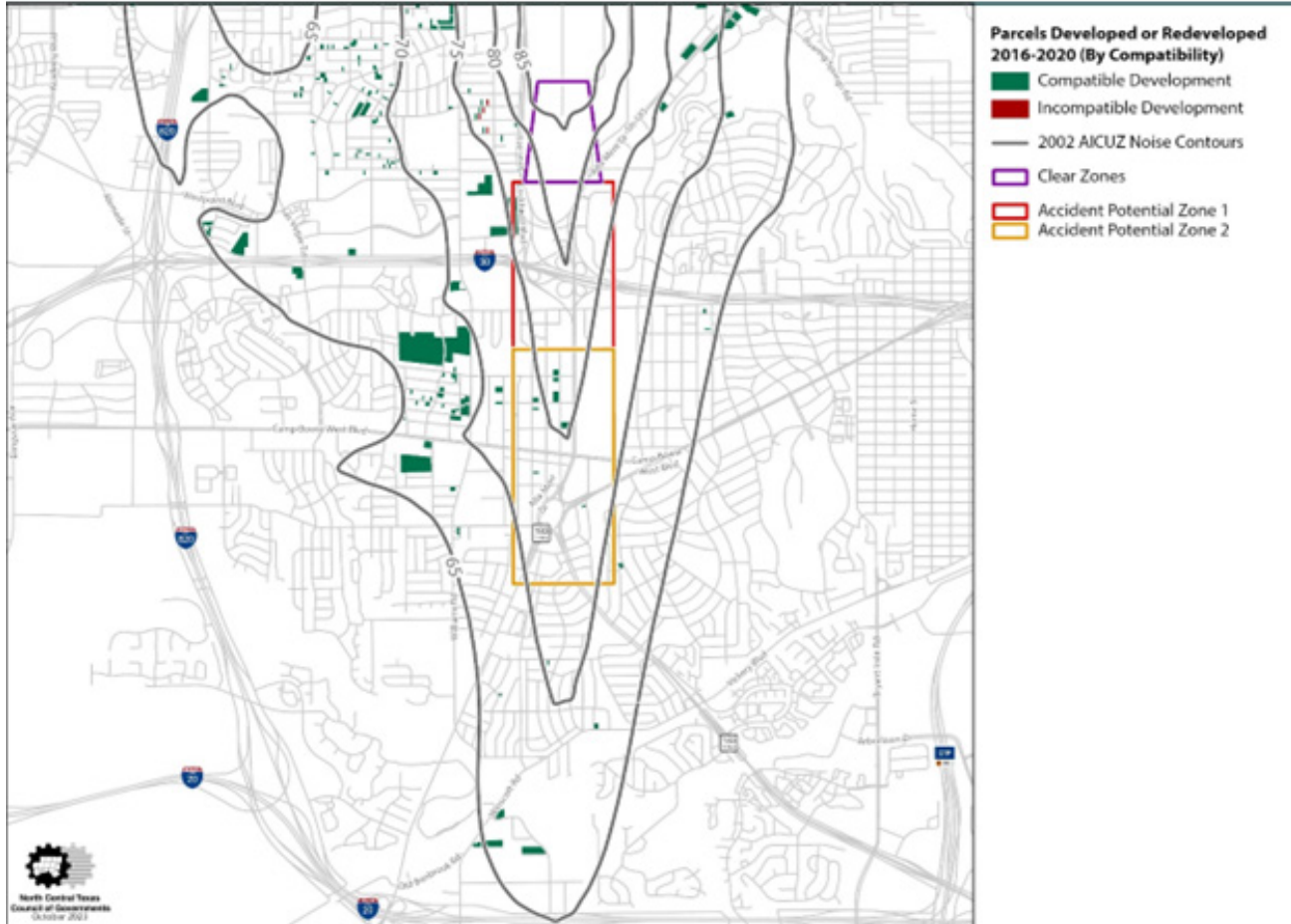


JOINING FORCES

NORTH TEXAS

Figure 22

Change in Compatibility 2016-2020 (South)

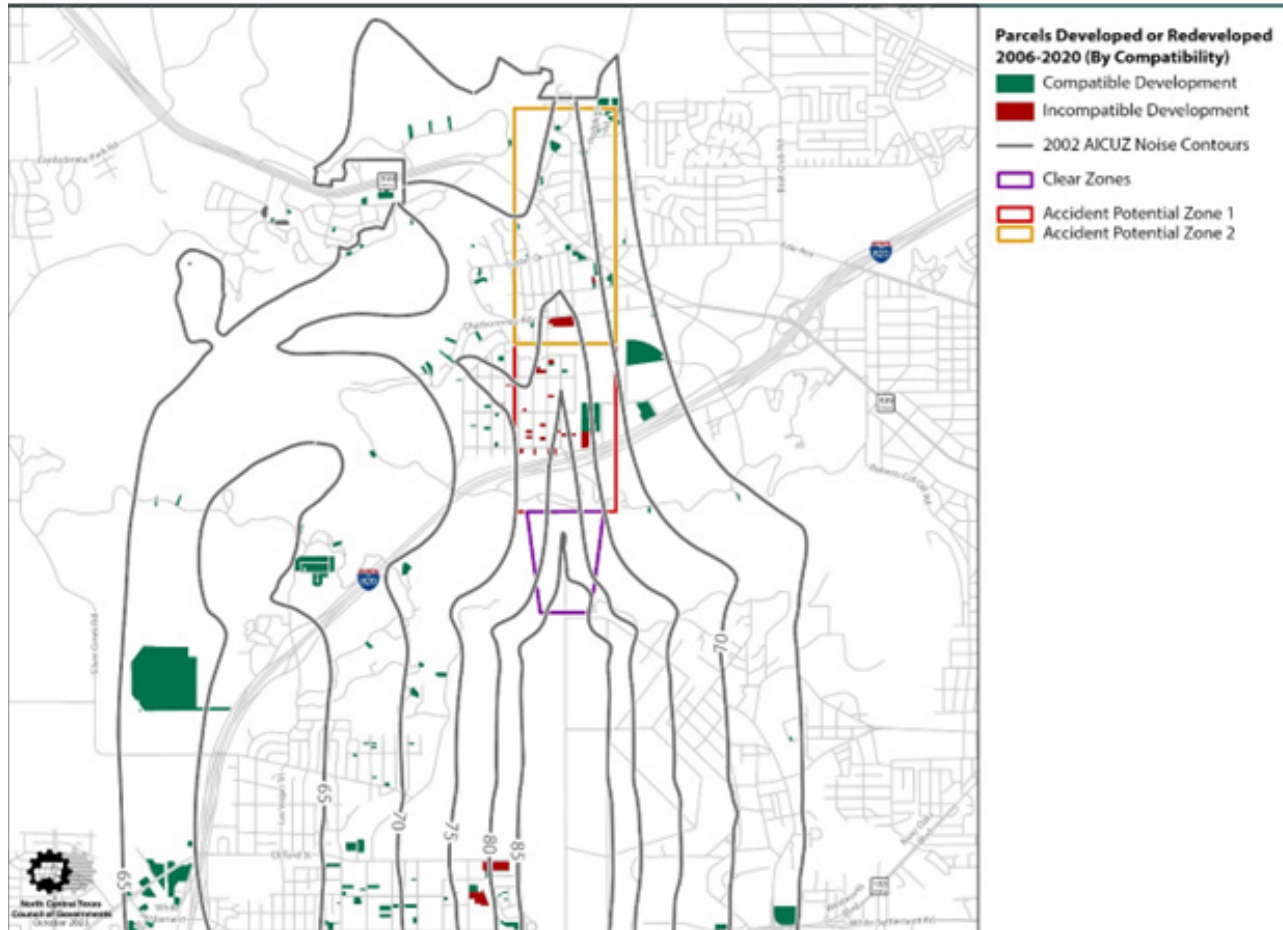


JOINING FORCES

NORTH TEXAS

Figure 23

Change in Compatibility 2006-2020 (North)

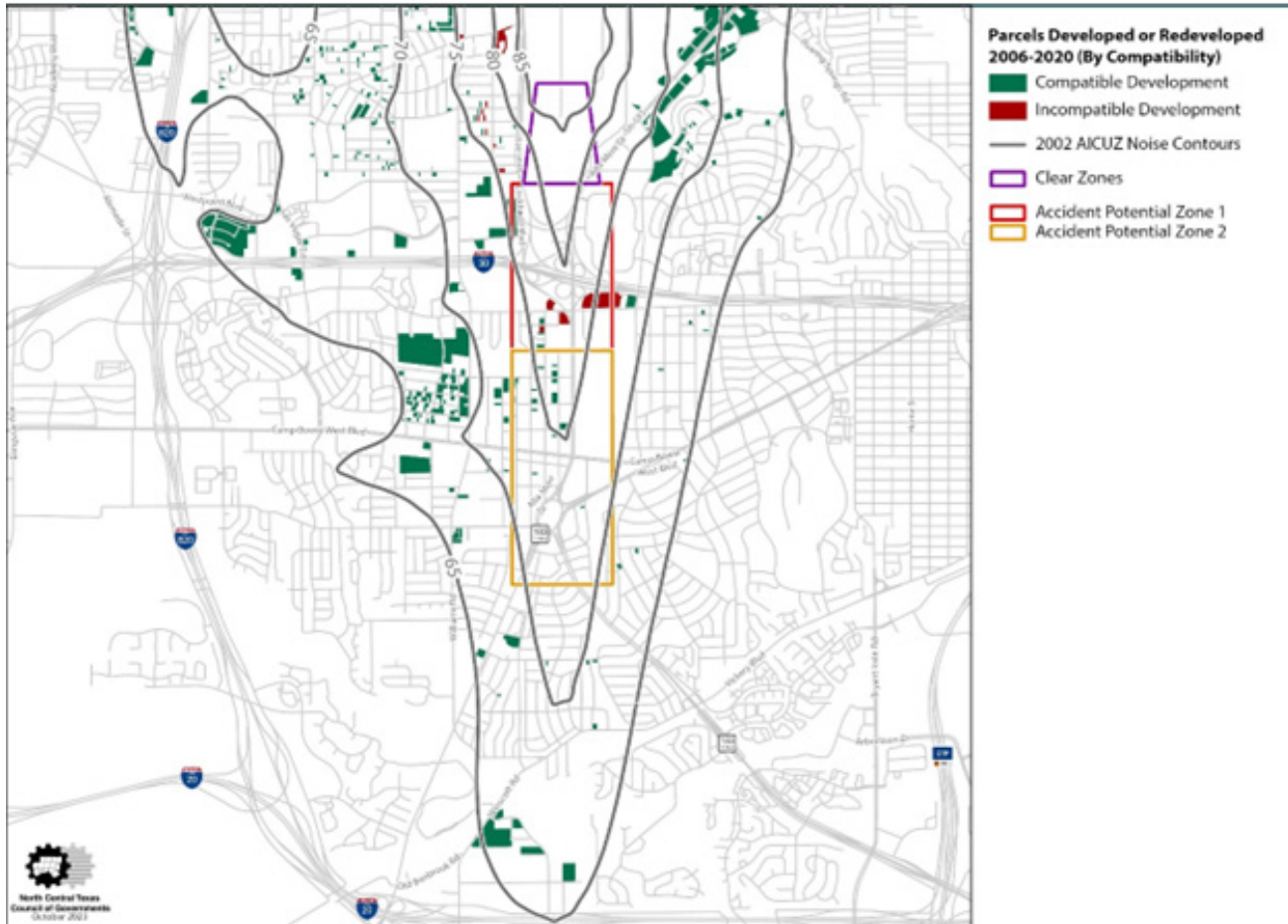


JOINING FORCES

NORTH TEXAS

Figure 24

Change in Compatibility 2006-2020 (South)



JOINING FORCES

NORTH TEXAS

Table 7

	Out 65	APZ II 65	Out 70	APZ II 70	APZ I 70	Out 75	APZ II 75	APZ I 75	CZ 75	Out 80	APZ I 80	CZ 80	Out 85
Compatible, Increased Degree	105	3	46	31	3	6	0	0	0	0	0	0	0
Compatible, No Change	469	10	93	53	2	16	27	0	0	1	0	0	0
Compatible, Prev. Incompatible	0	1	0	3	1	12	5	42	0	26	3	0	0
Compatible, Prev. Vacant	135	0	59	6	0	1	4	5	0	6	0	0	0
Compatible, Decreased Degree	129	1	23	24	0	4	8	0	0	4	1	0	0
Incompatible, No Change	0	0	0	2	1	2	3	15	0	5	3	0	0
Incompatible, Prev. Vacant	0	0	0	0	0	8	0	1	0	0	0	0	0
Incompatible, Prev. Compatible	0	0	0	16	0	6	2	5	0	2	2	0	1

Table 8

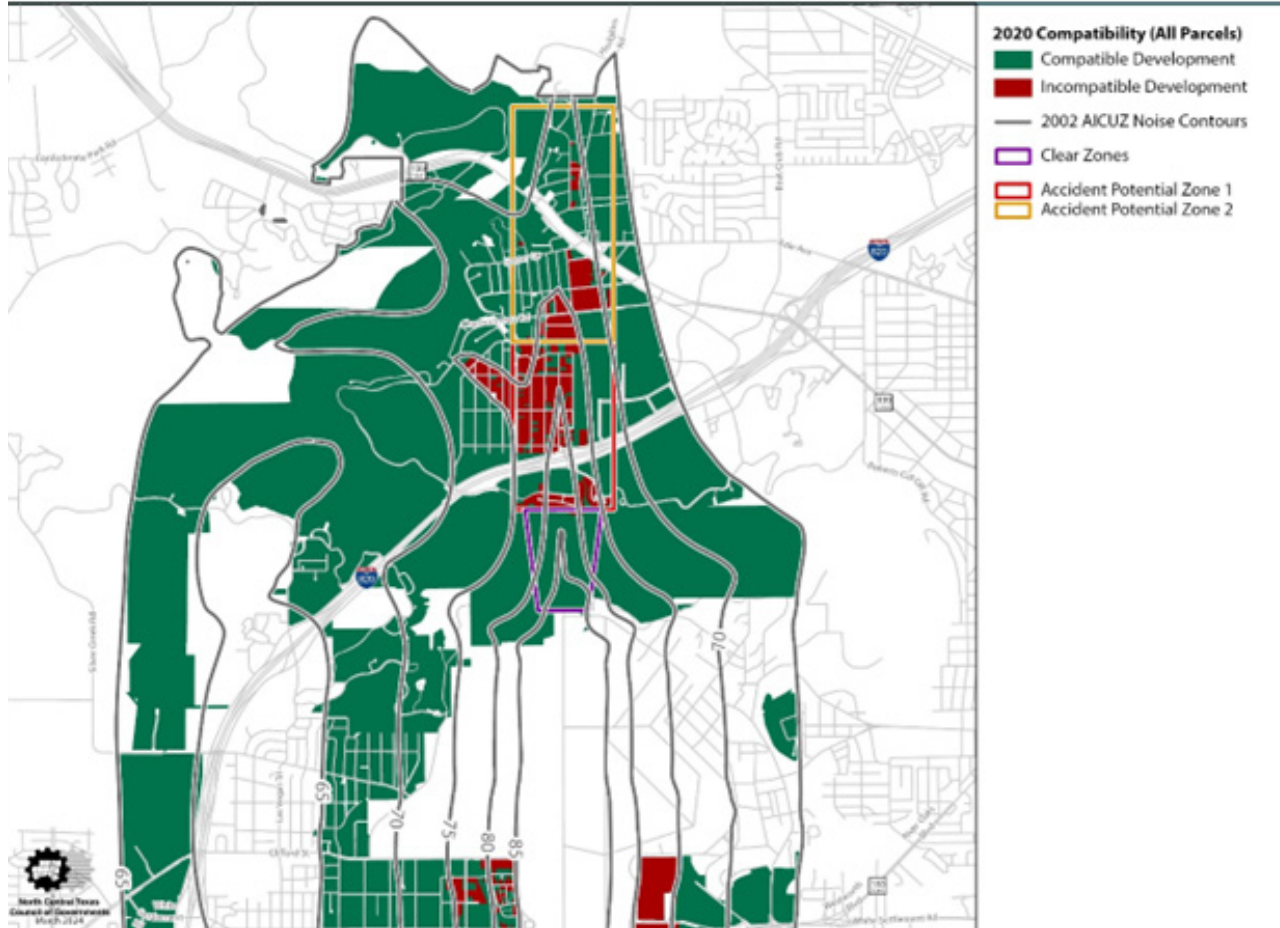
	Out 65	APZ II 65	Out 70	APZ II 70	APZ I 70	Out 75	APZ II 75	APZ I 75	CZ 75	Out 80	APZ I 80	CZ 80	Out 85
Compatible, Increased Degree	199	3	98	43	2	4	1	0	0	0	2	0	0
Compatible, No Change	529	9	178	35	0	8	7	0	0	0	0	0	0
Compatible, Prev. Incompatible	0	1	0	1	1	17	8	39	0	13	2	0	0
Compatible, Prev. Vacant	506	4	119	12	0	2	6	4	0	6	0	0	0
Compatible, Decreased Degree	131	1	40	24	1	4	11	0	0	8	1	0	0
Incompatible, No Change	0	0	0	6	4	21	5	15	0	3	1	0	0
Incompatible, Prev. Vacant	0	0	0	0	0	15	1	9	0	2	0	0	0
Incompatible, Prev. Compatible	0	0	0	13	0	6	4	9	0	5	2	0	1

JOINING FORCES

NORTH TEXAS

Figure 25

Compatibility - 2020 (North)

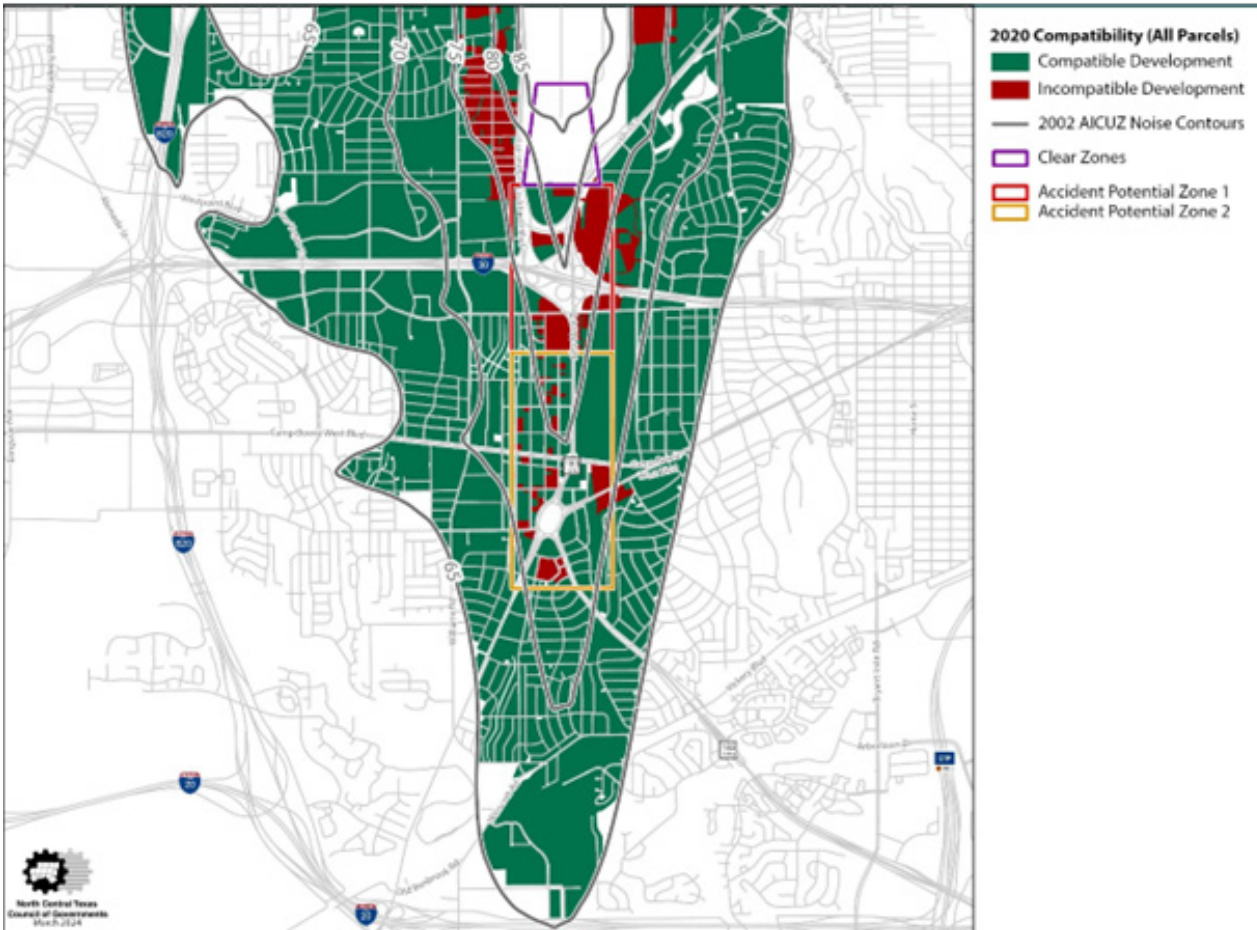


JOINING FORCES

NORTH TEXAS

Figure 26

Compatibility - 2020 (South)



JOINING FORCES

NORTH TEXAS

Figure 27

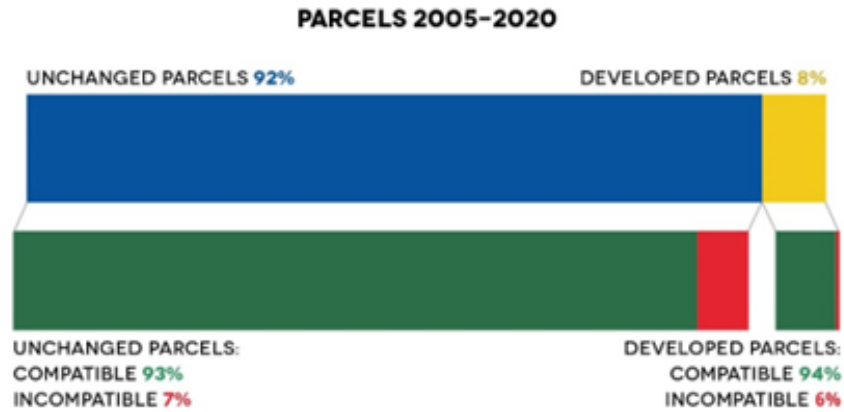
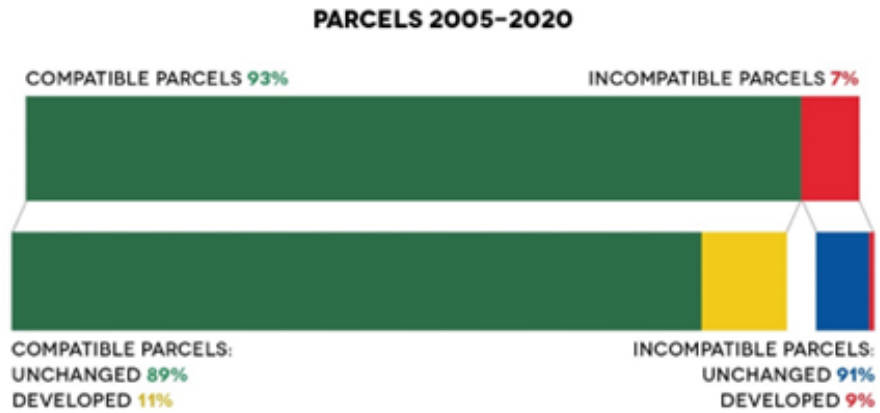


Figure 28



JOINING FORCES

NORTH TEXAS

CONCLUSIONS

The land use analysis has been used to document the progress made by the cities surrounding NAS JRB Fort Worth towards compatible development in the time since the first JLUS. The work of the Regional Coordination Committee in meeting quarterly to discuss compatibility and the corresponding Development Review Web Tool has demonstrated that the JLUS process is bringing added value to the Department of Defense by shining a light on this important topic.

There are 12,645 parcels in the AICUZ area, a majority of which developed well prior to any focus being placed on compatible development. Even still, 93 percent of these parcels are considered compatible in 2020. Only 8 percent of the parcels had some change in land use between 2006-2020, and of those parcels with a land use change, 94% developed as a compatible land use. This summary information can most easily be visualized in **Figures 27-28**. **Table 9** shows the compatibility assessment broken down by each 5-year period and the overall time period. Of note is the very small number of parcels that developed or redeveloped to become incompatible. This shows that the focus being placed on this issue by the cities is paying dividends and should be continued.

A challenge with the data should be noted. The land use classification by NCTCOG's RIS Department is not completely precise or accurate. Inaccuracies affecting more than 5 percent of the parcels and that significantly impacted compatibility were manually altered. These inaccuracies were often in misclassifying parcels as parks when in fact they were simply vacant parcels. So, if a parcel had been misclassified in 2005 as a park, if it then developed into a residential property (as is often the case with vacant parcels in the study area), then it was showing as a decline in compatibility even if it was still a compatible parcel. In addition, changes in the land use codes used by RIS have changed over time, making full comparisons difficult and those have been accounted for as best as possible.

JOINING FORCES

NORTH TEXAS

Table 9

	2005-2010	2010-2015	2015-2020	2005-2020
Compatible, Increased Degree	245	338	201	362
Compatible, No Change	11,029	11,099	11,106	10,473
Compatible, Prev. Incompatible	65	38	93	88
Compatible, Prev. Vacant	395	205	213	662
Compatible, Decreased Degree	142	94	197	222
Incompatible, No Change	793	834	790	765
Incompatible, Prev. Vacant	21	7	14	28
Incompatible, Prev. Compatible	56	34	34	45