

LANCASTER AIRPORT

Lancaster Airport Sector Plan and Lancaster Encroachment Study

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FAA Partnership Conference
March 11 , 2008



Background

- 306 Acres
- Reliever Airport
- One 5,000 x 100 Ft Runway
- 40,000 # DWL Capacity
- 6,000 Surrounding Acres Purchased
- Most Zoned Agriculture Open
- Major Transportation/Logistics Hub Proposed
- City Initiated Update to Comprehensive Plan
- Update evolved into the

Lancaster Airport Sector Plan



Background

ANALYSIS

- **Comprehensive Land Use Plan of 2002**
 - Proposed Residential Developments Near Airport
 - Mixed Use Plan in Vicinity of Airport
- **Lancaster Airport Master Plan of 2006**
- **Lancaster Thoroughfare Plan**

Drivers:

- **Opportunities Arising from Proposed Logistics Hub**
- **Proximity of Current UP Intermodal Facility**
- **Expected Airport Growth and Mission Change**

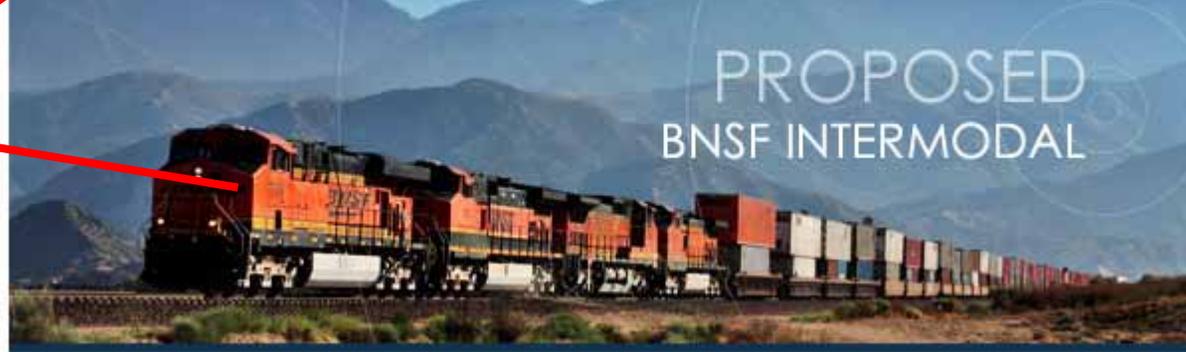




...Expected Growth and Mission Change!



CURRENT
UNION PACIFIC INTERMODAL



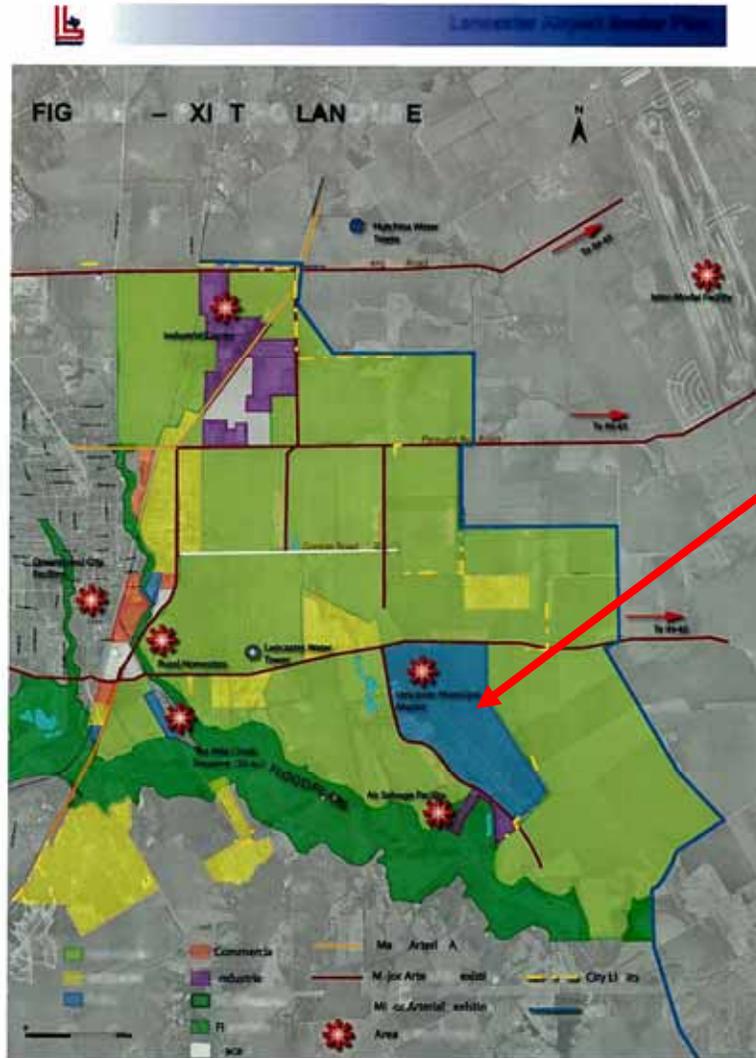
PROPOSED
BNSF INTERMODAL



LOGISTICS
LANCASTER AIRPORT

DALLAS
LOGISTICS  HUB
The Center for Worldwide Trade

Previous Zoning



- AGRICULTURE
- RESIDENTIAL
- PUBLIC
- COMMERCIAL
- INDUSTRIAL

MIXED USE



Background

GUIDING PRINCIPLES

- Promoting the airport as an economic engine
- Taking advantage of the airport's proximity to the Intermodal facility and an abundance of vacant/agricultural land surround LNC
- Recommending appropriate use of the area
- Balancing the needs of the Dallas Logistics Hub against the concerns of residents
- Assuring an attractive transition from airport to downtown Lancaster
- Taking advantage of Lancaster location with respect to the Metroplex and freight and transportation routes
- Controlling residential development in the sector area





Background

GOAL

- Ensure the airport is a successful productive economic engine that is aligned with desires and needs of citizens



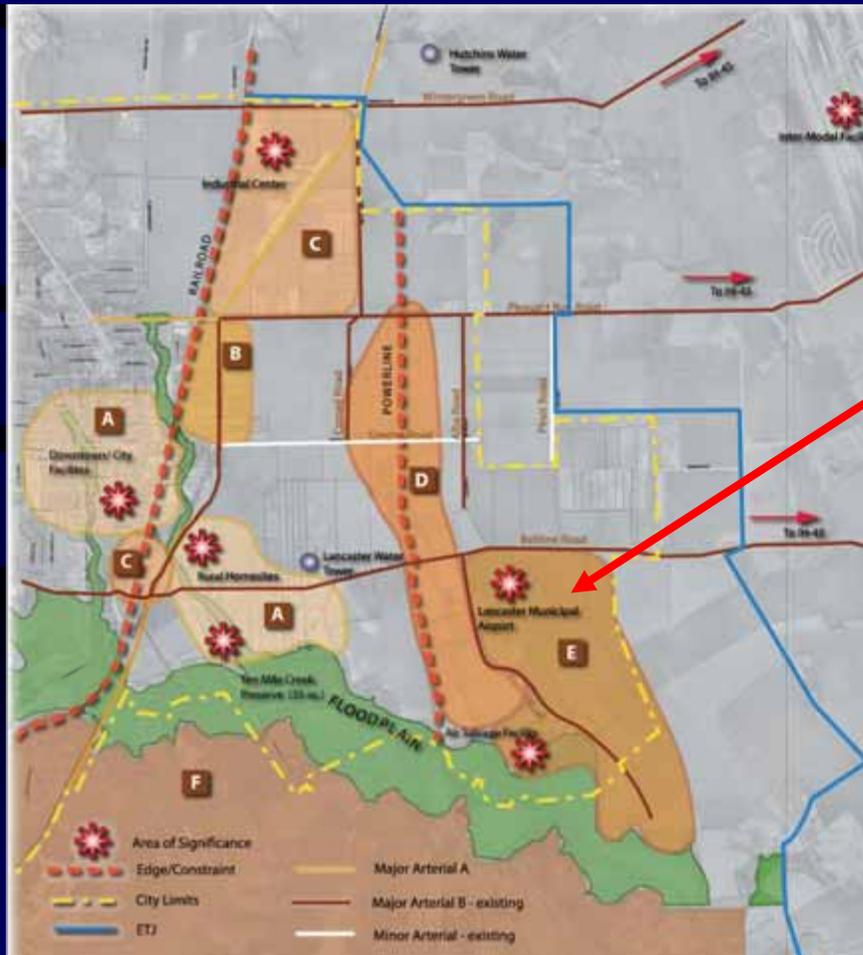
OBJECTIVES

- Develop a new Zoning District
- Identify land uses for the Zoning District and sub-districts
- Develop appropriate design/development standards



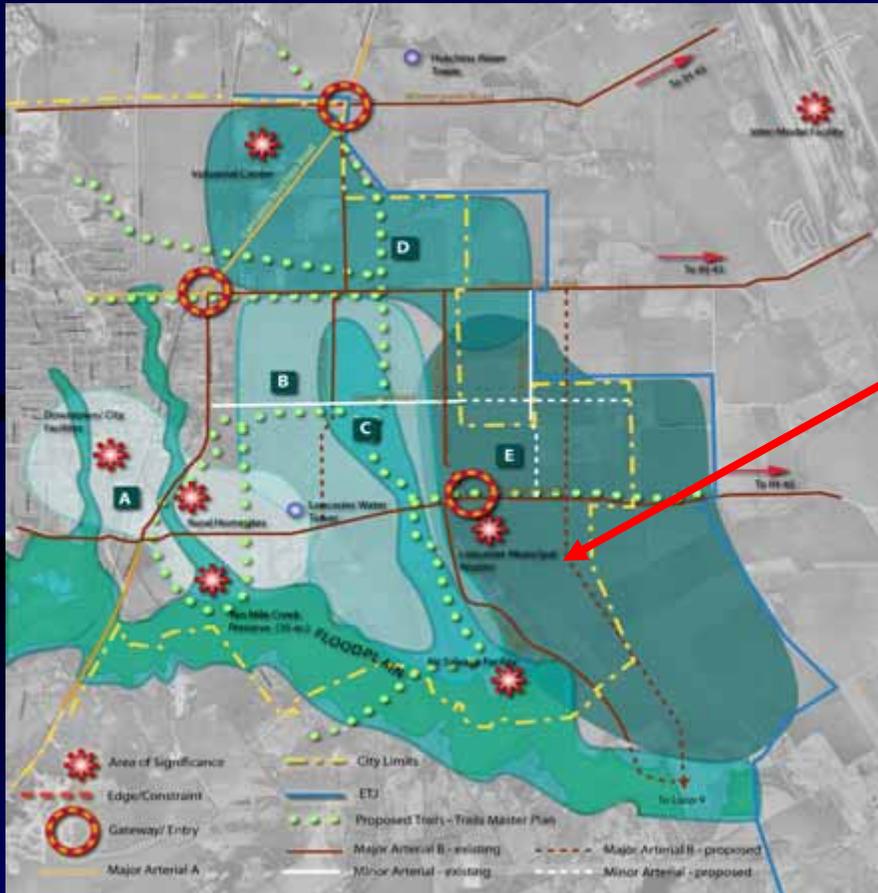
Developing Themes

Existing Character



- A. Historic and Heritage**
- B. Narrow Lot Residential**
- C. Industrial**
- D. Greenbelt / Power Line**
- E. Airport**
- F. Residential**

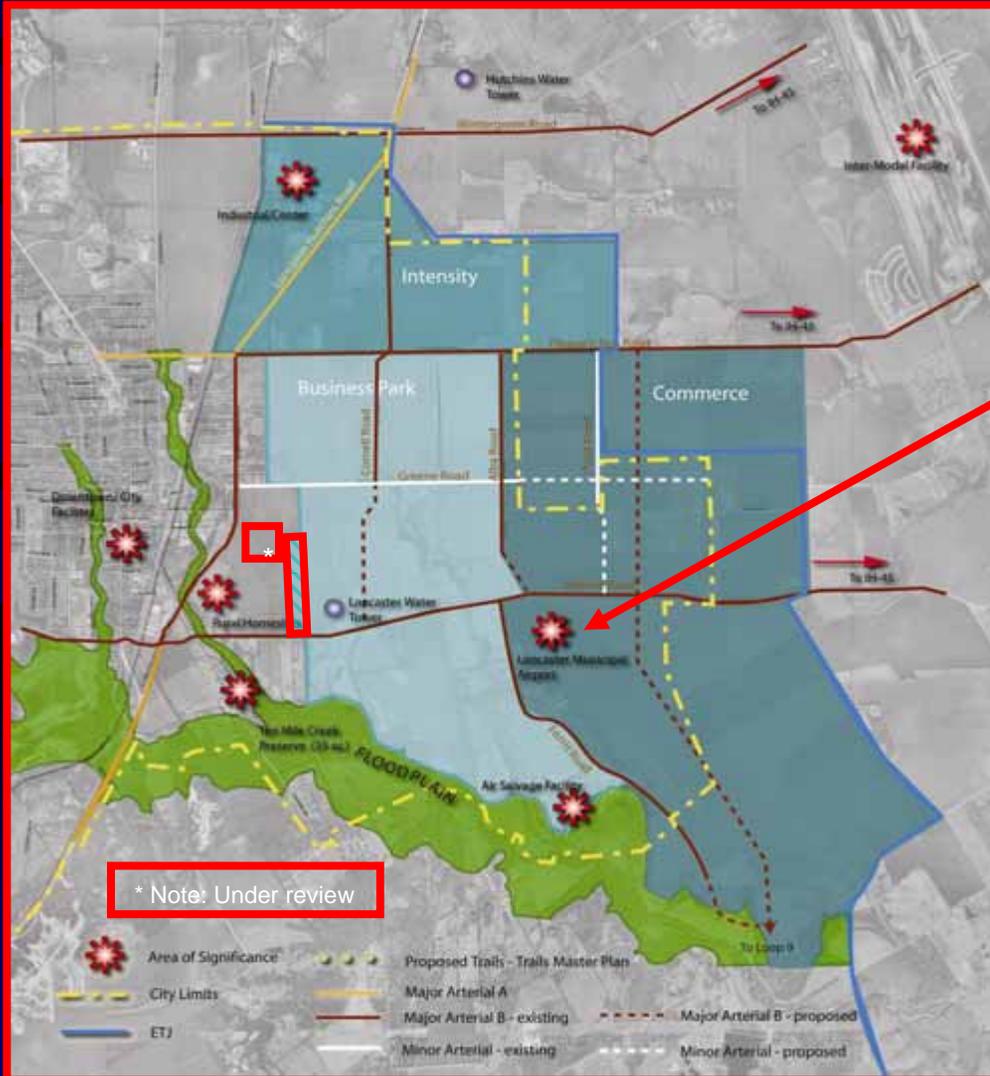
Themes



- A. Preservation**
- B. Business Park**
- C. Natural**
- D. Intensity**
- E. Commerce**



The LanPort District



- Business Park
- Intensity
- Commerce



Development Standards

- **Permitted Uses**
- **Building Placement**
- **Site Controls**
- **Exterior Appearance**
- **Exterior Illumination**
- **Parking**
- **Off-Street Loading**
- **Screening Requirements**
- **Lighting and Glare Regulations**
- **Landscaping**
- **Sign Standards**
- **Streetscape**
- **Utilities**



Airport as a High Priority



City Council Goals and Objectives	
FIVE YEAR GOALS Financially Sustainable City Government Higher Quality Development: Residential and Commercial City – an Organization of Excellence Enhanced City Infrastructure and Facilities Greater Community Unity and Pride The Preferred Place to Live: Professionals and Families	LANCASTER MISSION LANCASTER CITY GOVERNMENT is FINANCIALLY SUSTAINABLE and provides EFFICIENT, CUSTOMER-FRIENDLY SERVICES Our citizens have TRUST AND CONFIDENCE IN CITY GOVERNMENT AND LEADERS.
Policy Agenda 2007-2008	LANCASTER VISION 2022
TOP PRIORITY <ul style="list-style-type: none">• Road Reconstruction & Improvements: Funding• Annexation Plan and Action• Downtown Development Plan TIF (Tax Increment Financing) & PID (Public Improvement District)• Airport Area Development Plan & Overlay (Lanport) Development• City-School Strategy: Staff, Council, and Community	LANCASTER IS A PROUD VIBRANT CITY. <i>We Celebrate Our Diversity and History, Preserve Our Natural Beauty, and are the Economic Hub of South DFW Metroplex. Our Citizens Take Pride in Our City.</i> THE LANCASTER COMMUNITY is the <i>Best Place to Live</i> with <i>Excellent Schools and Educational Opportunities</i> and <i>Attractive Corridors and Neighborhoods.</i> Our Citizens Enjoy Convenient Living.
HIGH PRIORITY <ul style="list-style-type: none">• Financial & Investment Policies Refinement• Financial Commitments Analysis & Funding<ul style="list-style-type: none">• I-35 Overlay Plan & District• Allen Group Development• Nokomis Road Bridge Stream Bank Protection: Funding• Comprehensive City-Wide Litter Control Program	MAJOR PROJECTS 2007-2008 <ul style="list-style-type: none">* Public Safety Building* Senior Center Building* Municipal Courts* I-20 Service Road: Construction* Dallas Avenue Utility Replacement (Beltline to Pleasant Run): Construction* Fire station 2: Renovation* Sewer Lift Station Upgrade: Construction* Visitor's Center: Construction* Community Park Improvements (Pavilion, Playground Equipment, Trails, Basketball Court)

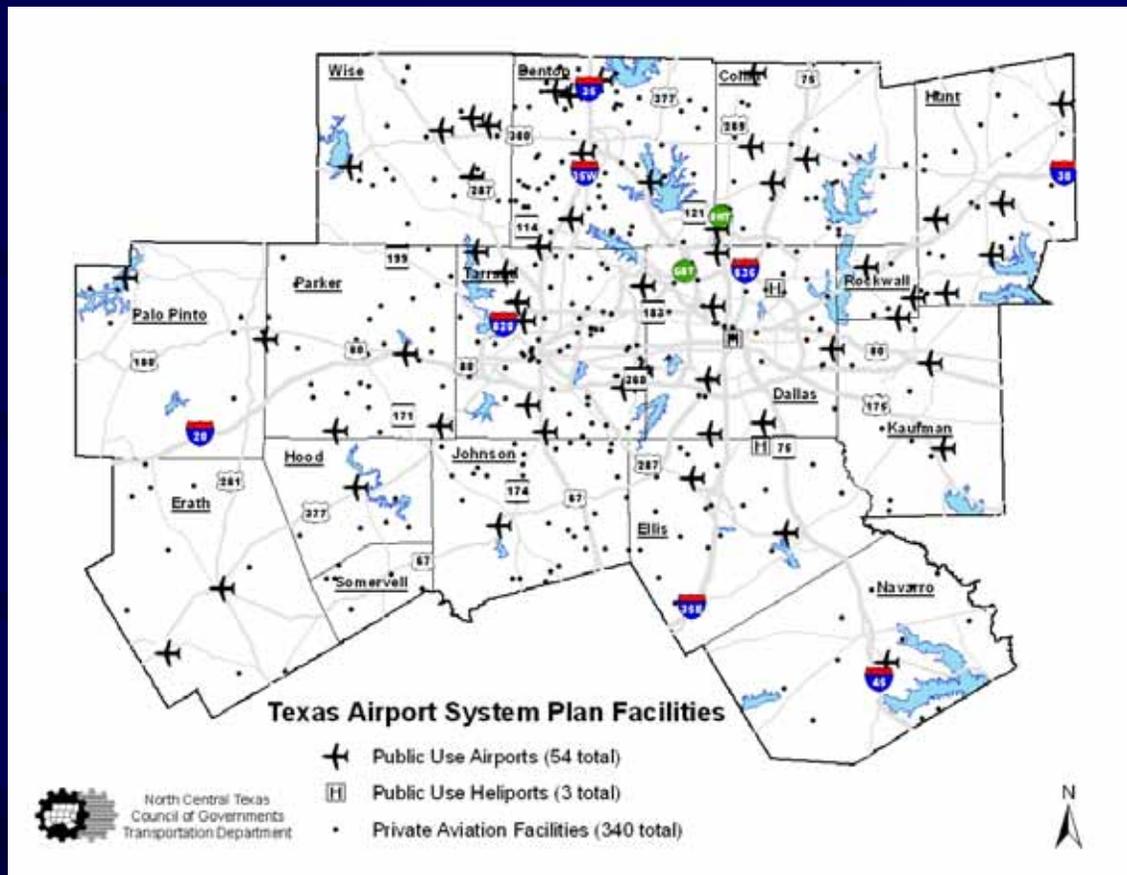
NCTCOG Aviation Initiatives

Air Transportation
Technical Advisory
Committee

Federal Aviation
Administration
Partnership

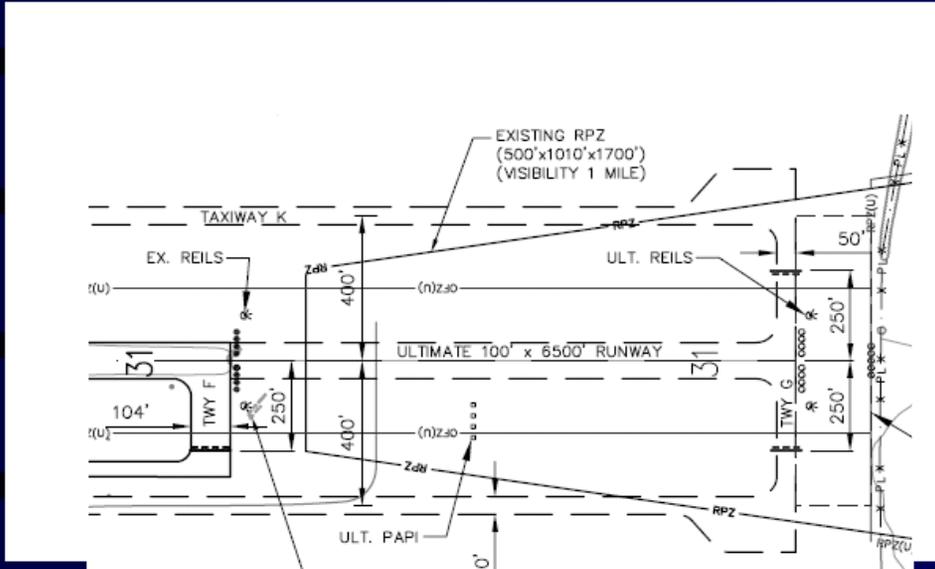
Naval Air Station
Joint Reserve Base
Program

Surface Access to
Aviation



Lancaster Encroachment Study *

Airport Development Projects



Current Runway: 5,000'

Planned extension: 6,500' total

- Land acquired this year
- Construction next year

Planned (but not yet funded):

- Additional runway extensions
- Install Instrument Landing System (ILS)
- Construct aircraft parking apron
- Construct additional parallel taxiway

Southern Dallas County Logistics District

Regional Transportation Council Planning Project

Partnerships: Hutchins, Lancaster, Wilmer, City of Dallas, Dallas County, TxDOT, NCTCOG

Goal: Support planning for infrastructure projects and development of a hub for national and international logistics.

Issues: Housing and Commercial Markets
Development Standards and Incentives
LEED Buildings and Best Management Practices
South Dallas Foreign Trade Zone
Transportation Access, Security, Reliability and Efficiency

Key Outcome: Promote economic development in the area and help materialize the full potential for the emerging inland port.

Lancaster Encroachment Study

Goal and Objectives

Goal:

Perform an Encroachment Analysis for a sample General Aviation Airport and demonstrate how an aggressive land use strategy surrounding the airport can maximize long-term functionality of the airfield and economic development opportunities.

Objectives:

1. Identify existing and potential future airspace obstructions
2. Evaluate airport noise and anticipated impacts
3. Prevent non-compatible development adjacent to the airport
4. Foster the mutual goals of the community, airport, & property owners

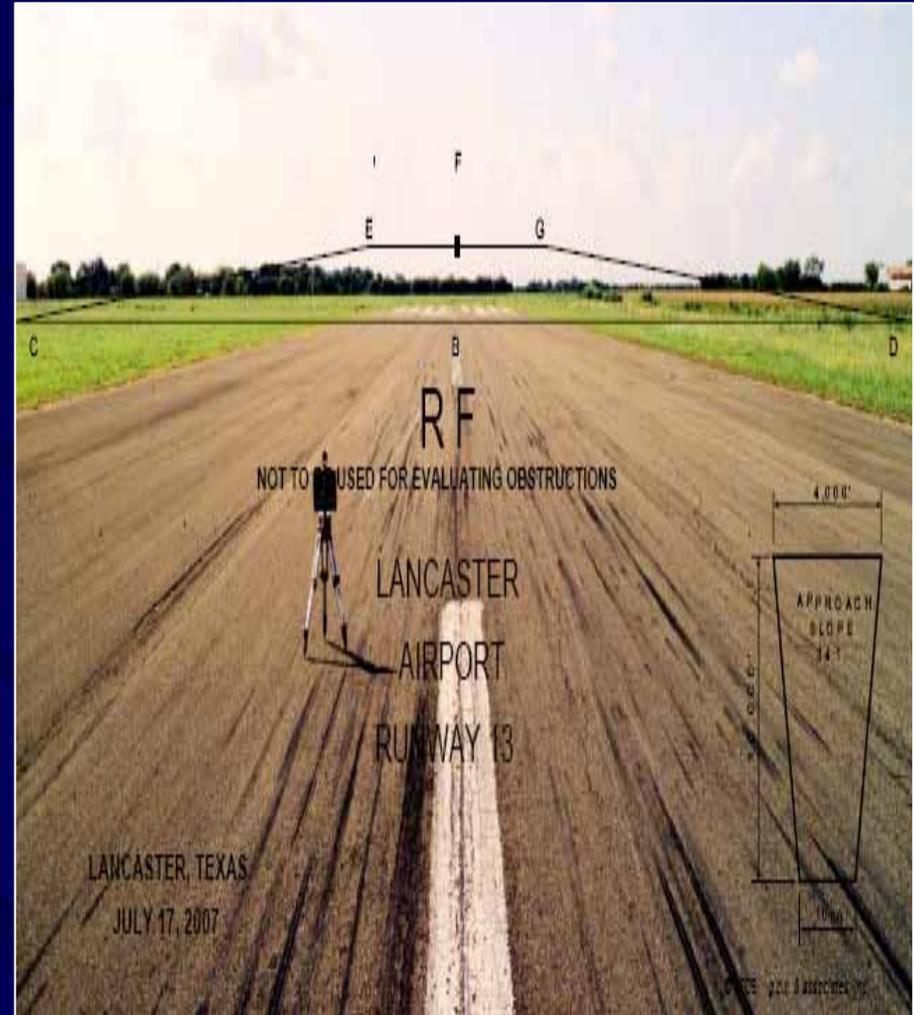
Lancaster Encroachment Study

GCR Photoslope Analysis

High resolution
photography

Photos used in
computer model

Obstructions' x,y,z
location determined



Lancaster Encroachment Study

Obstruction Analysis

- No obstructions with the current runway approaches
- Minor obstructions with 7,500 ft runway (extension to south)
- Minor additional obstructions with total runway length of 10,000 ft (extension to north)
- Potential obstructions dependent upon development patterns
- Obstructions will need to be cleared for each runway extension project
- Road relocations required



Compatible Aircraft by Design

CORPORATE, CHARTER, & GENERAL AVIATION AIRCRAFT

**Current 5,000'
Runway**



**Extended 7,500'
Runway**



**Ultimate 10,000'
Runway**



AIR CARGO & AIRLINE AIRCRAFT

**Current 5,000'
Runway**



**Extended 7,500'
Runway**



**Ultimate 10,000'
Runway**



**Regional
Turboprops:
DHC-8, Saab 340**

**Most Narrowbody
Jets:
MD80, B737**

**Widebody Jets:
MD-11, B747**

Previous Zoning



2006 Zoning with 2006 DNL Noise Contours (5,000' Runway)



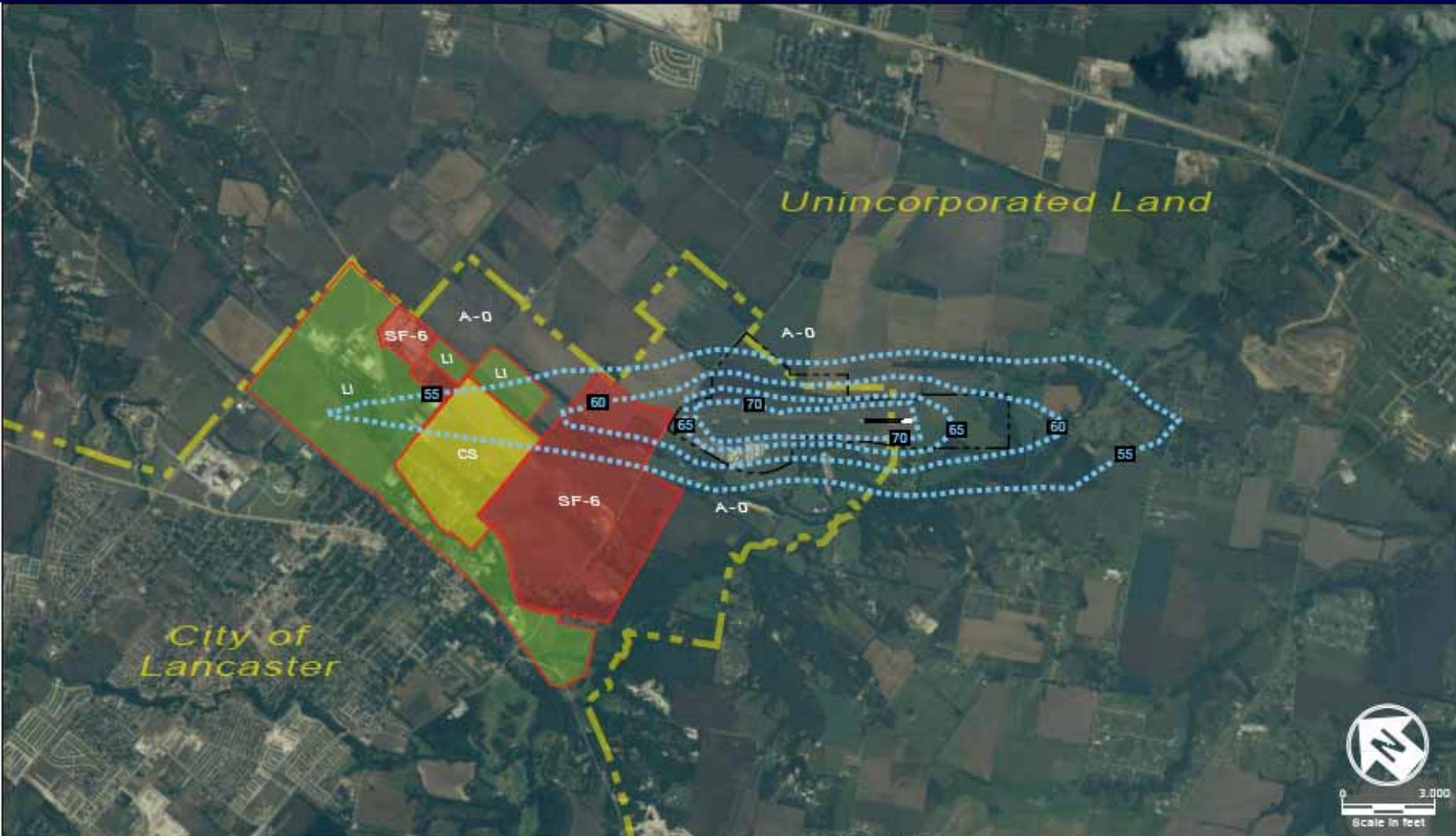
	A-0 (UNSHADED)		PLANNED DEVELOPMENT (PD)
	COMMERCIAL SERVICE (CS)		SINGLE FAMILY 6 (SF-6)
	LIGHT INDUSTRIAL (LI)		DNL Noise Contour
			CITY LIMIT

CIA
CONSULTING IN ARCHITECTURE & ENGINEERING
8 WILSON DRIVE, FORT LEE, NEW JERSEY 07024-2100
TEL: 201-261-4500 FAX: 201-261-4501

2006 LAND USE AND ZONING
 WITH 2006 DNL NOISE CONTOURS
 Demonstration Encroachment Analysis
 Lancaster Airport

FIGURE 2.1
 SEPTEMBER 2007
 PROJECT NO.
 16929

Projected 2011 Zoning with 2011 DNL Noise Contours (6,500' Runway)



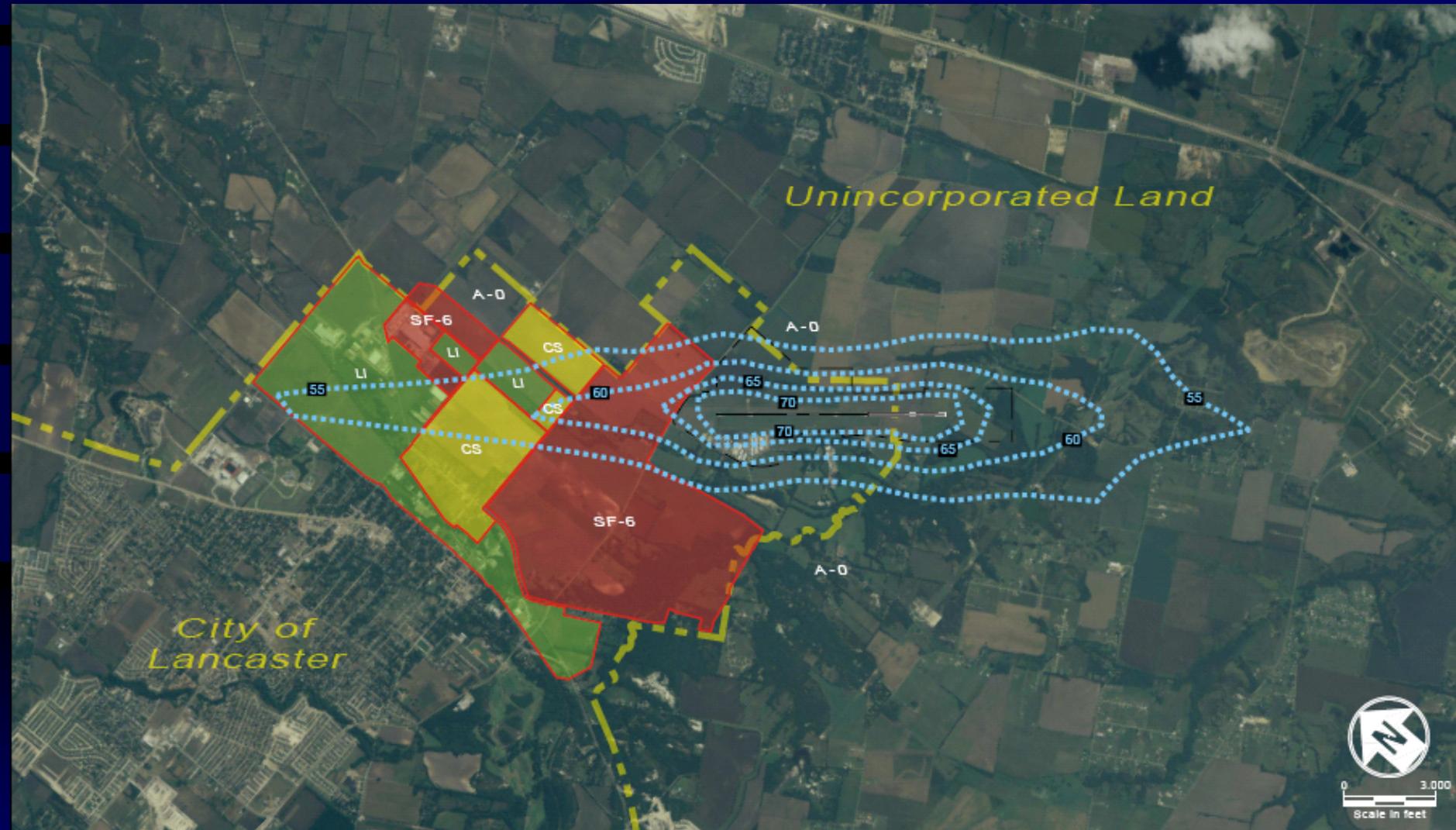
	A-0 (UNSHADED)		SINGLE FAMILY 6 (SF-6)
	COMMERCIAL SERVICE (CS)		65 DNL Noise Contour
	LIGHT INDUSTRIAL (LI)		CITY LIMIT

CIA
CLASH HARBOR & ASSOCIATES LLP
100 WINDY CREEK, PO BOX 2386 - ALABAMA, MO 63120-0238
PHONE: (314) 430-4700 | WWW.CIASHARBOR.COM

PROJECTED 2011 LAND USE AND ZONING WITH 2011 DNL NOISE CONTOURS
 Demonstration Encroachment Analysis
 Lancaster Airport

FIGURE 2.2
 SEPTEMBER 2007
 PROJECT NO. 16925

Projected 2016 Zoning with 2016 Noise Contours (7,500' Runway)



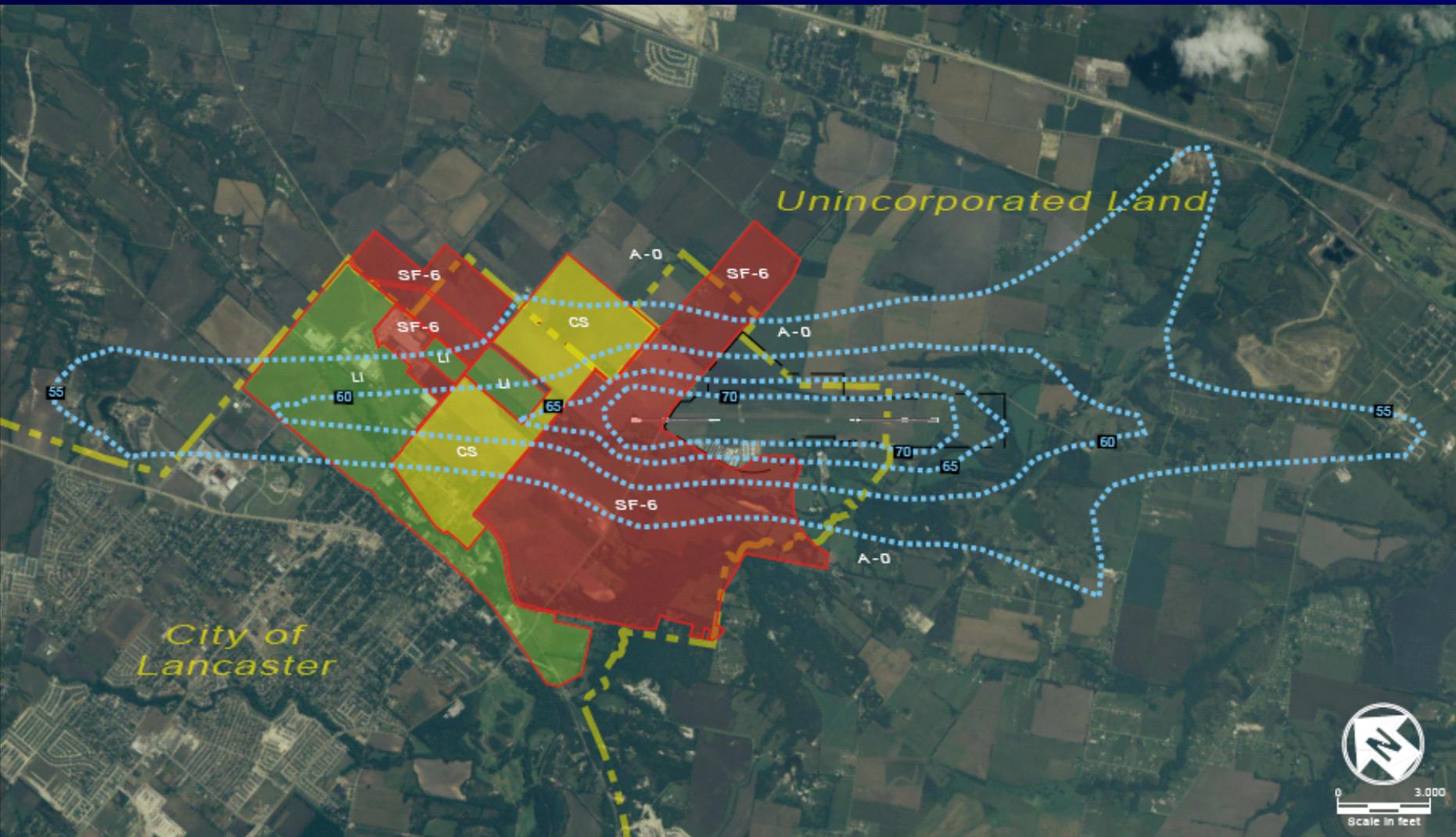
	A-0 (UNSHADED)		SINGLE FAMILY 6 (SF-6)
	COMMERCIAL SERVICE (CS)		65 DNL Noise Contour
	LIGHT INDUSTRIAL (LI)		CITY LIMIT



PROJECTED 2016 LAND USE AND ZONING WITH 2016 DNL NOISE CONTOURS
 Demonstration Encroachment Analysis
 Lancaster Airport

FIGURE 2.3
 SEPTEMBER 2007
 PROJECT NO. 16929

Projected 2026 Zoning with 2026 Noise Contours (10,000' Runway)



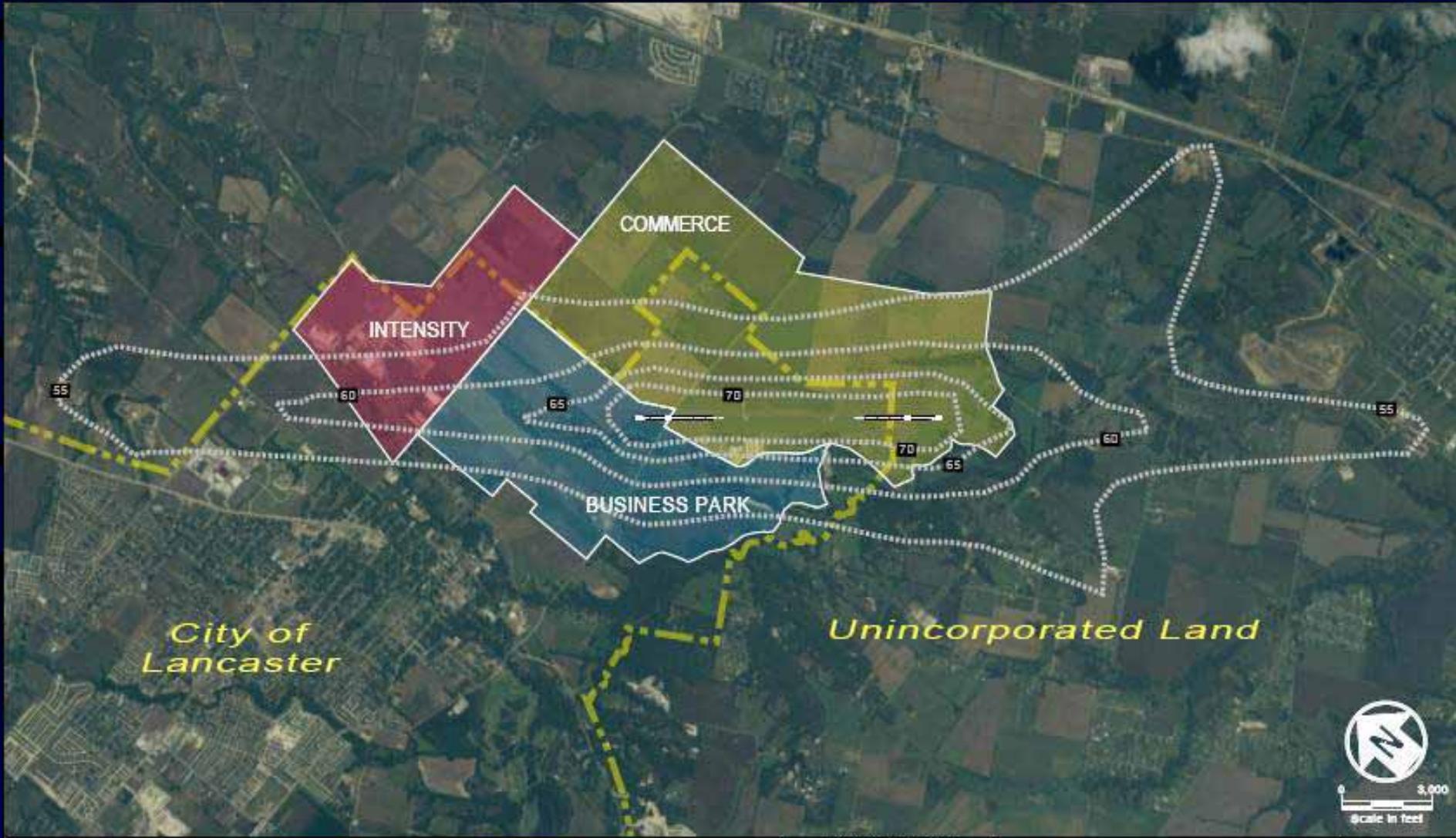
	A-0 (UNSHADED)		SINGLE FAMILY 6 (SF-6)
	COMMERCIAL SERVICE (CS)		65 DNL Noise Contour
	LIGHT INDUSTRIAL (LI)		CITY LIMIT



PROJECTED 2026 LAND USE AND ZONING WITH 2026 DNL NOISE CONTOURS
 Demonstration Encroachment Analysis
 Lancaster Airport

FIGURE 2.4
 SEPTEMBER 2007
 PROJECT NO. 16929

LanPort Zoning Districts with 2026 Noise Contours (10,000' Runway)



PROPOSED LANPORT DISTRICT PLAN
WITH 2026 DNL NOISE CONTOURS
Demonstration Encroachment Analysis
Lancaster Airport

FIGURE 2.5
SEPTEMBER 2007
PROJECT NO.
16929

Lancaster Encroachment Study

Encroachment Study Recommendations

<i>Action</i>	<i>Timeline</i>
1. Implement the currently proposed LanPort Zoning District	Immediate
2. Discuss with the Allen Group about specific future role of LNC	
3. Complete land acquisition to the south for the 7,500' runway extension & protect land to the north & east from development	
4. Conduct presentations to City Council and planning and zoning commission members about the importance of Lancaster Airport	
5. Meet with neighboring local governments	
6. Consider institutional structures/agreements to protect future airport development	

Lancaster Encroachment Study

Encroachment Study Recommendations

7. Update Airport Layout Plan and Capital Improvement Plan to reflect new goals of the Airport	Within 5 years
8. Review all proposed development to ensure long-term compatibility	
9. Relocate Ferris Road for runway extension	
10. Relocate Belt Line Road for runway extension	
11. Establish development review procedures with neighboring municipalities	
12. Acquire easements for property to north for runway extension	

Lancaster Encroachment Study

Encroachment Study Recommendations

<p>13. Study alternative runway configurations and analyze possible locations and associated land requirements</p>	<p>Within 10 years</p>
<p>14. Purchase property to the east of the runway for potential future landside development</p>	<p>Long-Term</p>

Airport Planning Documents – In Place



Lancaster Encroachment Study

For More Information:

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