

Dallas Love Field Good Neighbor Program & Alternate Entry Update

Transportation and
Infrastructure Committee

December 3, 2019

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Department of Aviation



Purpose of Briefing

The purpose of this briefing is to provide an update on Dallas Love Field's:

- Good Neighbor Program
- Alternate Entry Analysis

Background

- The 2015 Dallas Love Field Airport Master Plan Update adopted by City Council identified several strategic development programs for safe, efficient, economically vibrant and responsive operations of the airport.
- The Master Plan update identified a need to be more responsive to the needs of the communities served by the airport and the need to alleviate congestion at the only entrance to the airport. Two strategic priorities identified:
 - The Good Neighbor Program was developed to engage the community and identify projects beneficial to the community
 - Alternate Entry analysis was undertaken to address congestion and mobility issues on surrounding roadways with specific attention to Mockingbird Lane/Herb Kelleher Way/Cedar Springs Road intersection

GOOD NEIGHBOR PROGRAM



What is the Good Neighbor Program (GNP)

- The GNP was developed to connect with surrounding communities, share information about ongoing projects, solicit input for future projects and to develop and implement projects that enhance walkability, quality of life and safety around Love Field
- It supports the City of Dallas' goals of developing livable, walkable, and interconnected neighborhoods
- Quarterly meetings are held with communities and stakeholders. To date, 17 GNP meetings, including 10 workshops, have been held and about 400 citizens have participated in these meetings

GNP Goals

- Off-Airport urban design, landscaping & beautification
- Encouragement of recreational activities including parks & trails
- Signage and way-finding initiatives
- Pedestrian improvements
- Safety and lighting improvements
- Traffic improvements
- Drainage improvements
- Bicycle paths
- Regular interface with community
- Response to community concerns

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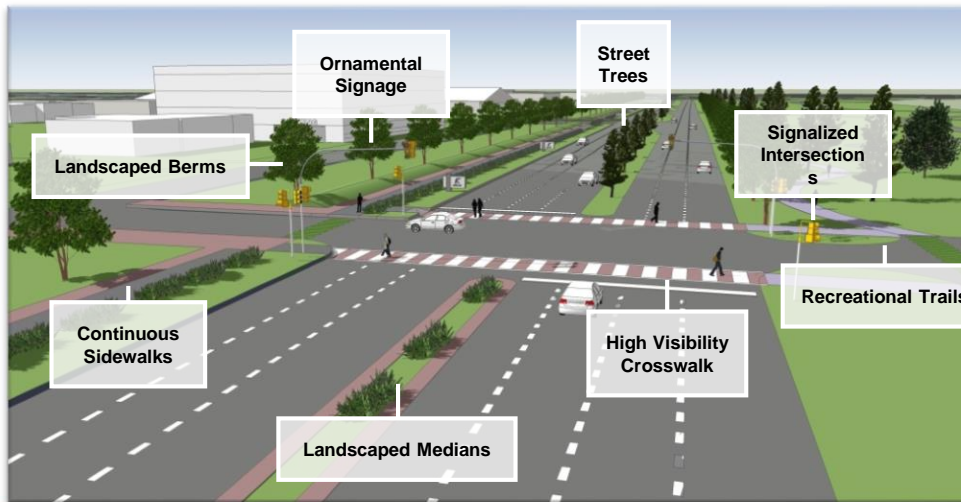
Priorities from Good Neighbor Program Input

Top Three Priorities:

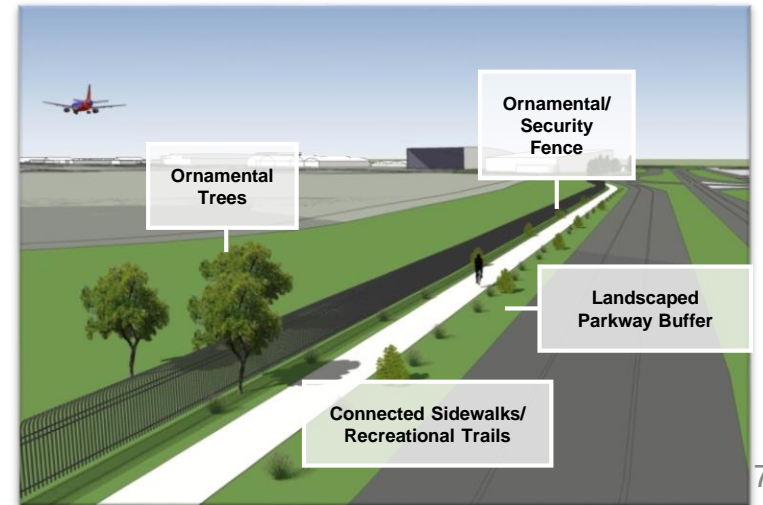
1. Pedestrian Connections
2. Landscaping
3. Buffers



Lemmon Avenue and Lovers Lane



Airdrome Drive



GNP Improvements

- Since 2015 several improvements have been constructed
- Specifically with respect to roadway landscaping and signage:
 - Greens and shrubbery planted near airport entrance
 - Irrigation and landscaping, including seasonal flowers, installed outside of Administration Building



GNP Improvements Contd.

- Pedestrian Connections
 - Sidewalks added along Mockingbird Lane near Love Field entrance and from Herb Kelleher Way to Denton Drive



GNP Improvements Contd.

- Buffers
 - Updated chain-link to 8-foot wrought iron fence around perimeter of Love Field



GNP Improvements Contd.

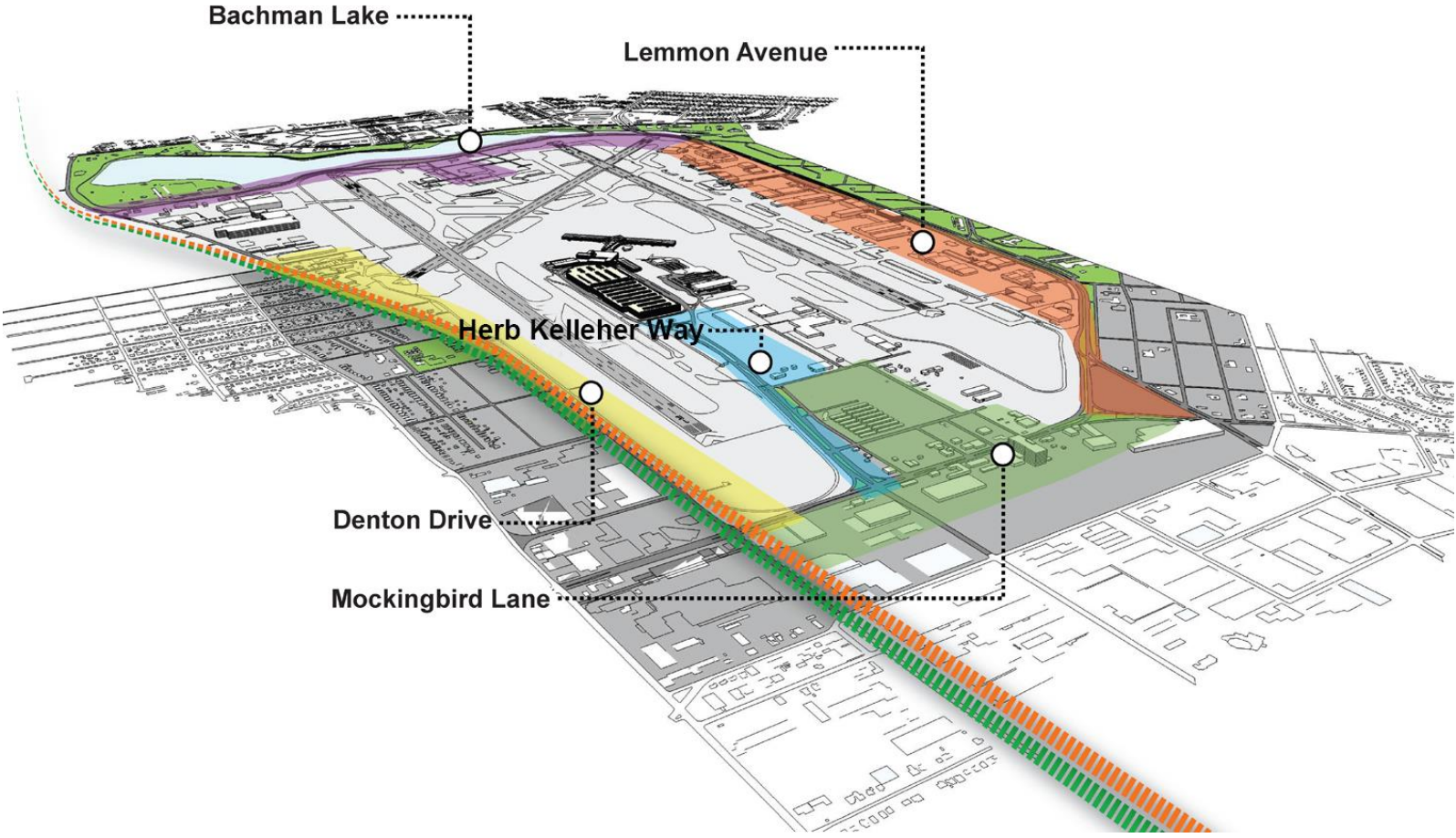
- A goal of the Good Neighbor Program is to enhance urban design, landscaping and beautification of our perimeter
- We actively work to enhance public spaces with art
 - Contrails art sculpture dedicated in 2017
 - Contrails is a site-specific sculpture, inspired by the unique cloud forms created in the wake of a plane
- Travel + Leisure magazine ranked Love Field as one of the top airports in the U.S., specifically mentioning the public art program



GNP Projects – DAL Streetscapes Enhancement

- The Department of Aviation is dedicated to creating a walkable, bicycle friendly and safe environment on the internal and external roadways around Love Field
- To achieve this, several projects are being undertaken:
 - Entry Road Enhancements
 - Lemmon Avenue Streetscape Enhancements
 - The Love Field Loop Trail – the City was recently awarded a National Parks Services grant for assistance with developing concepts and plans
 - Lemmon/ Bluffview Intersection Upgrades
- All of the above projects contain several or all of the following elements:
 - Pedestrian and bicycle pathways
 - Enhanced landscaping and lighting
 - Intersection safety improvements including new traffic signals
 - Public art and gateway features
 - Pocket parks

Surrounding Roadways



GNP Improvements - Entry Road Enhancements

Design almost complete on comprehensive plan to redesign the Love Field Entry Roadway

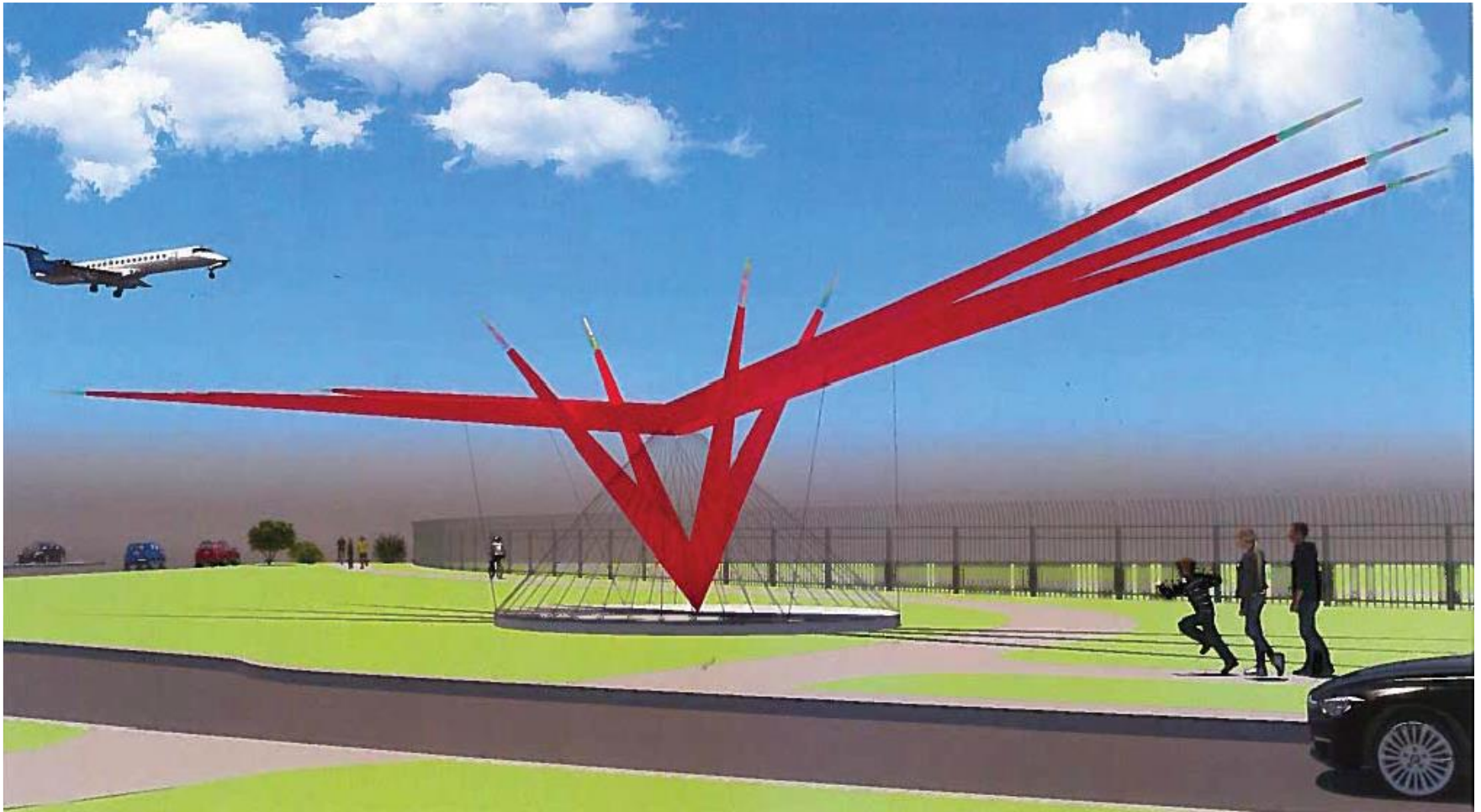
- Project will construct enhanced street and pedestrian lighting, pedestrian walkways, decorative security fencing, enhanced landscaping, signage and public art
- Upgrades will be made to Herb Kelleher Way, Mockingbird Lane and Airdrome Drive
- Project will be advertised for construction in 2020

GNP Improvements - Entry Road Enhancements



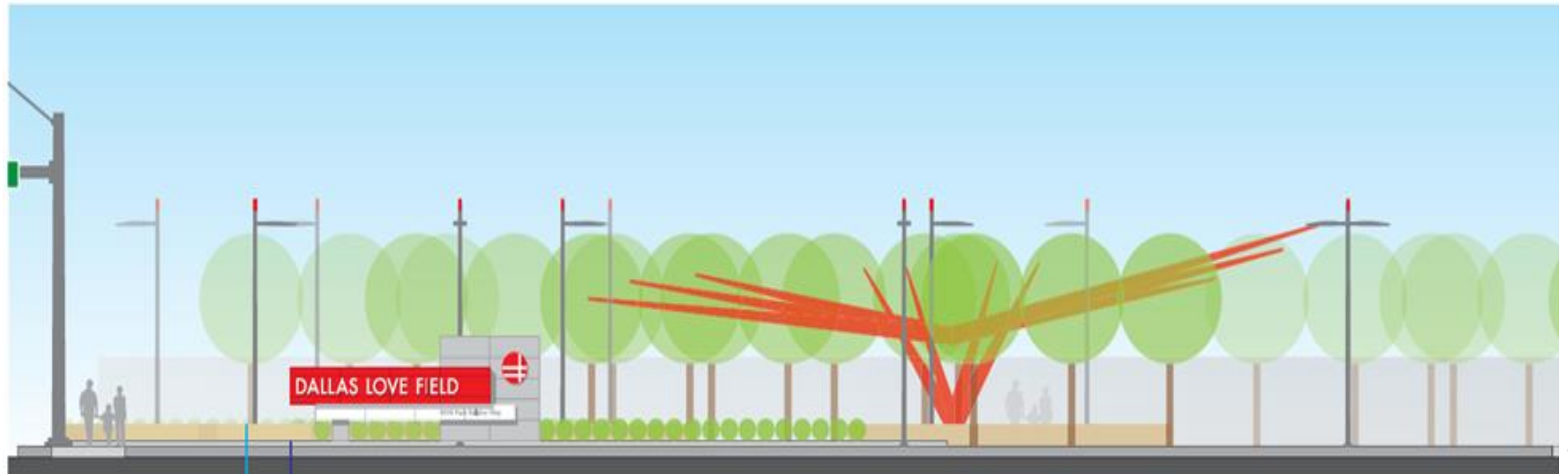
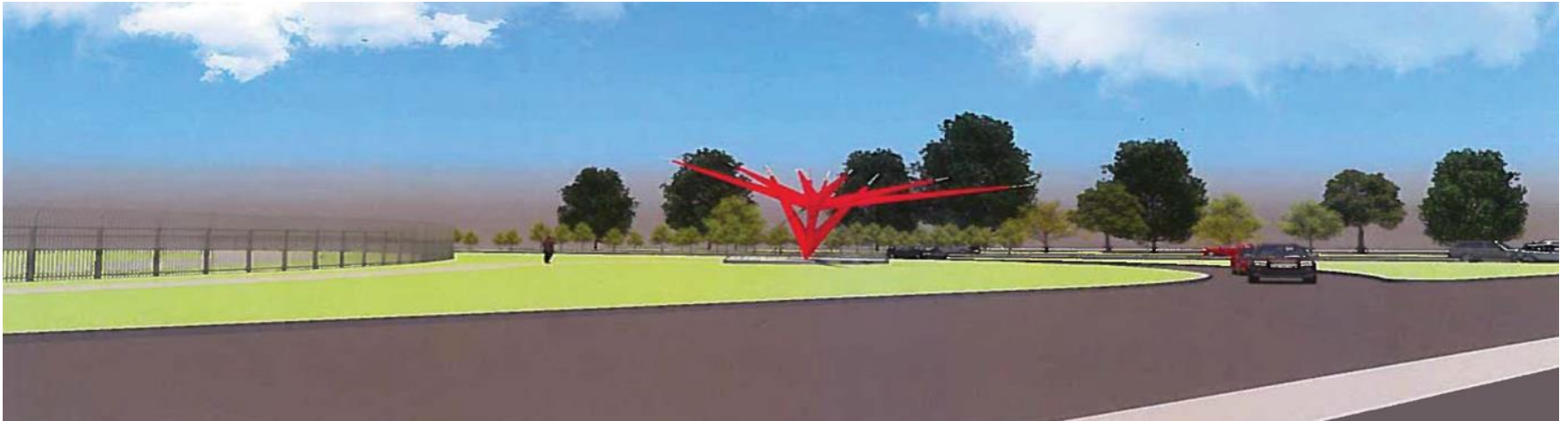
HERB KELLEHER WAY STREETSCAPE

Entry Road Enhancements – Proposed Art



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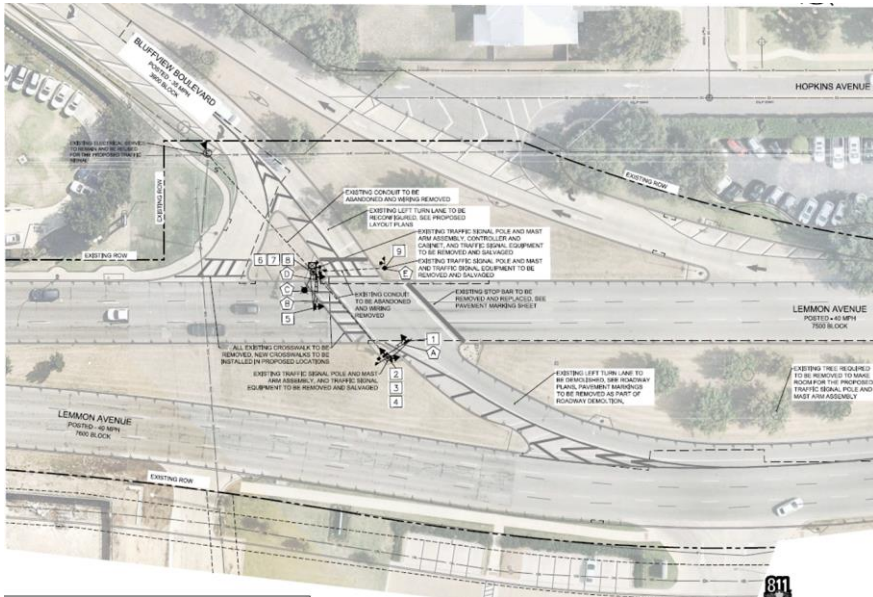
Entry Road Enhancements – Proposed Art and New Sign



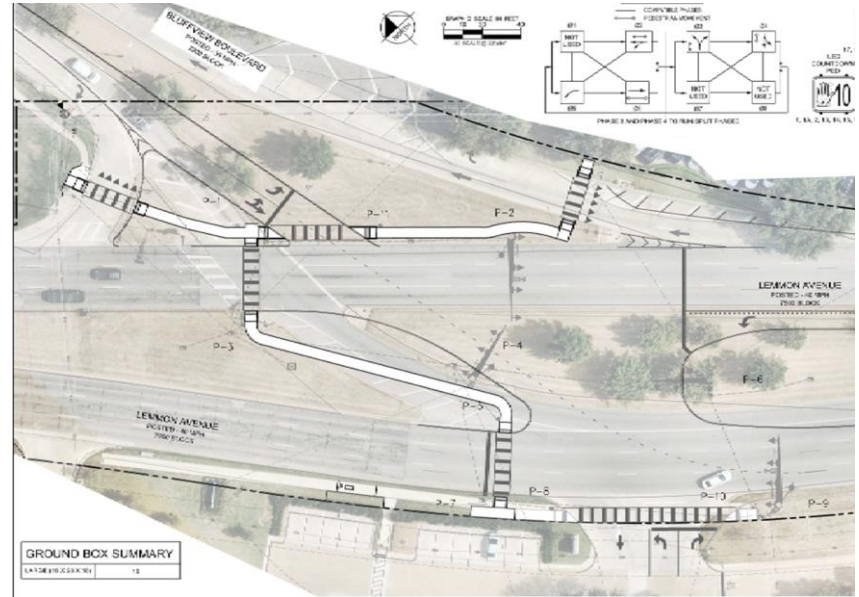
GNP Projects – Lemmon/Bluffview Intersection

- The Department of Aviation is partnering with DART, Department of Public Works and Department of Transportation to undertake improvements to the intersection of Lemmon Avenue and Bluffview Boulevard
- The project will facilitate safer pedestrian crossings across Lemmon Avenue and generally increase pedestrian safety by providing:
 - High visibility crosswalks
 - Pedestrian pathways
 - New traffic signal with pedestrian phasing and
 - Intersection safety lighting
- In addition, the intersection will be realigned in an effort to reduce vehicular accidents

Lemmon/Bluffview - Existing



Lemmon/Bluffview – Proposed



- No crosswalks across Lemmon
- Crosswalks end in median
- No pedestrian walkways in median
- Non-compliant Barrier Free Ramps
- Inadequate intersection lighting

- High visibility crosswalks
- Pedestrian pathways
- New traffic signal with pedestrian phasing
- ADA compliant Barrier Free Ramps
- Intersection safety lighting

ALTERNATE ENTRY ANALYSIS

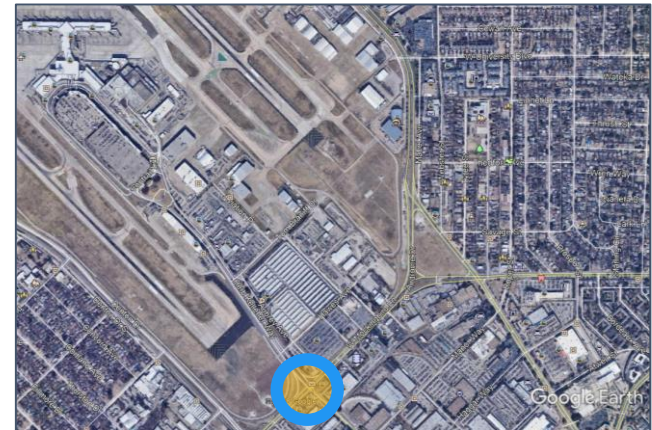
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Congestion at Love Field Entrance

- Dallas Love Field (DAL) currently has one main entrance/exit at the intersection of Mockingbird Lane/Cedar Springs Road/Herb Kelleher Way
- In 2012, DAL had 4.1 million enplaned passengers and the intersection operated at a Level of Service (LOS) “D”
- In 2013, the number of enplaned passengers was 4.2 million and the intersection had slipped to LOS “E”
- Area roadways were predicted to see continued growth in traffic volumes. In addition, the number of enplaned passengers at DAL was projected to rise. Both factors were predicted to negatively impact LOS at the intersection

Level of Service	Control Delay (seconds per vehicle)
A	<10.0
B	>10.0 and <20.0
C	>20.0 and <35.0
D	>35.0 and <55.0
E	>55.0 and <80.0
F	>80.0



Master Plan Update Preferred Alternative

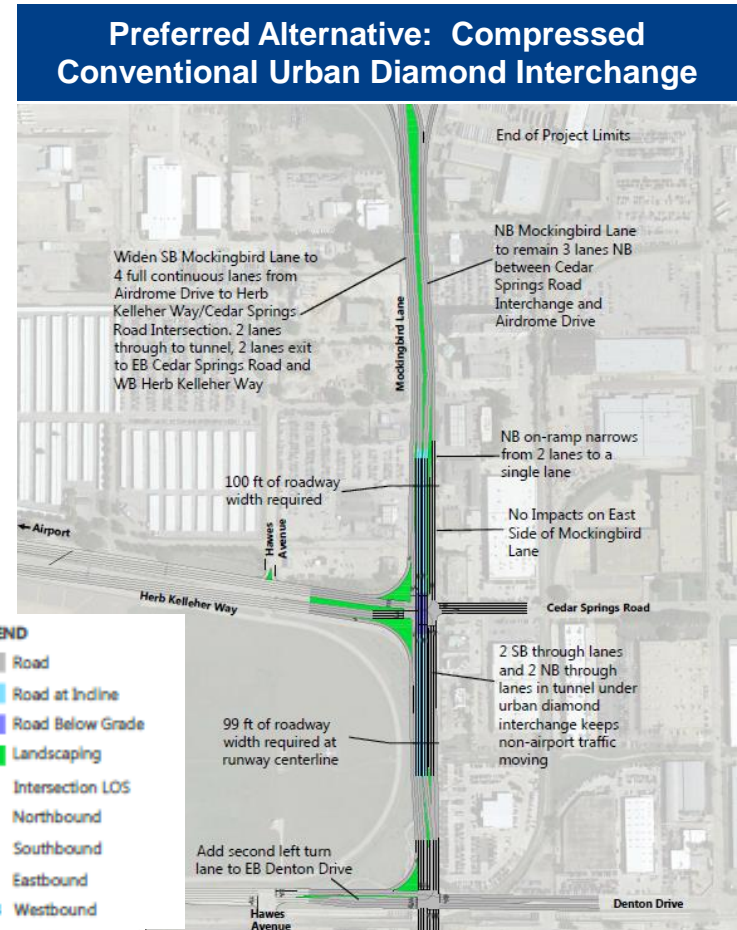
- The 2015 Master Plan Update analyzed three alternatives to mitigate congestion at Herb Kelleher Way/Cedar Springs Road and Mockingbird Lane intersection:

- 1. Compressed Conventional Urban Diamond Interchange**

2. Diverging Urban Diamond Interchange

3. Direct Ramp Interchange

- The Compressed Conventional Urban Diamond Interchange was recommended as the preferred alternative.

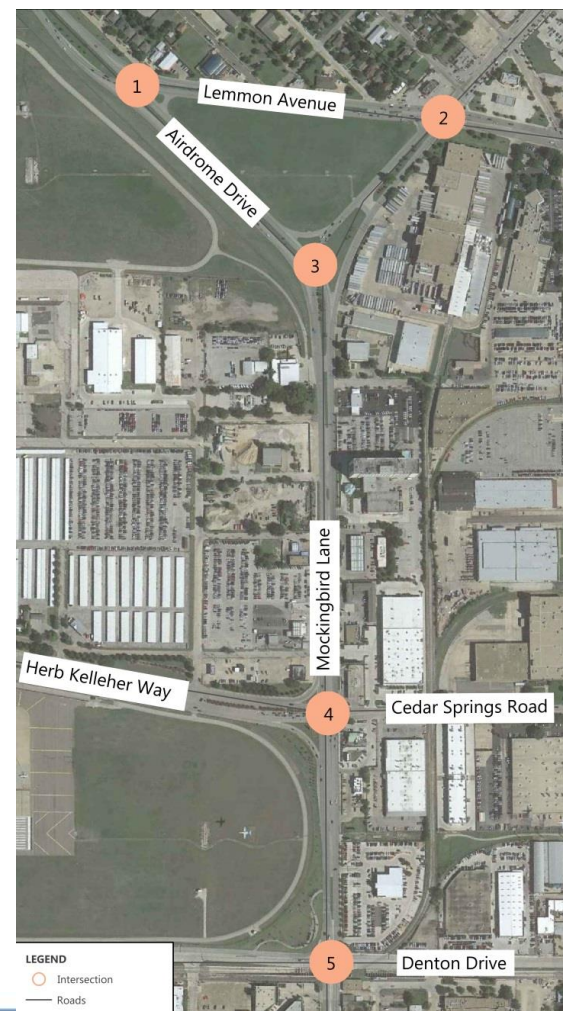


Increased Traffic

- Due to growth in passenger volumes after repeal of Wright Amendment, DAL enplanement forecasts were revised in 2017. The new forecast had enplanements doubling by 2019 (from 4.1 million in 2012 to 8.2 million by 2019)
- It was apparent that traffic volumes had exceeded forecasts in the Master Plan Update
- Robust economic activity in the metroplex contributed to further increase in non-airport traffic volumes on the surrounding roadways
- A subsequent traffic analysis with updated traffic volumes showed that several key intersections in the vicinity of Love Field would fail (LOS “F”) in 2019
- The preferred Master Plan Update alternative would create operational challenges of maintaining adequate access to the airport during construction due to the increase in traffic volumes

Level of Service (LOS) on Adjacent Roadways with 8.2 Million Annual Enplanements (2019 +/-)

Intersection		LOS at 8.2 MAEP	
		a.m. Peak	p.m. Peak
1	Lemmon Avenue and Airdrome Drive	C	F
2	Lemmon Avenue and Mockingbird Lane	F	F
3	Mockingbird Lane and Airdrome Drive	B	C
4	Mockingbird Lane and Cedar Springs Road/ Herb Kelleher Way	F	F
5	Mockingbird Lane and Denton Drive	F	F



Additional Alternatives 2017

- Four additional alternatives were identified and evaluated in 2017. These included two additional south entry alternatives and two north entry alternatives (Appendix A)
- South Entry Alternatives
 - Additional Entry at Waddell Avenue off Mockingbird Lane
 - “U” Turn at Mockingbird/Airdrome
- North Entry Alternatives
 - North access from Shorecrest Drive
 - North access from Northwest Highway with a bridge over Bachman Lake

MSIS Committee Direction

- The three Master Plan alternatives and the four new alternatives were re-evaluated in 2018
- An alternate entry from north was determined to be the preferred alternative based on reductions in congestion and Vehicle Miles Traveled (VMT), with a corresponding reduction in vehicle emissions
- The above analysis was presented to the Mobility Solutions, Infrastructure and Sustainability (MSIS) Committee in August 2018
- The MSIS Committee directed staff to identify and analyze additional alternatives

Four (4) Additional Alternatives - 2019

- Following directions of MSIS Committee, staff identified four (4) additional entrance alternatives – two (2) east entrance alternatives, one (1) west entrance alternative and an additional north entrance alternative (Appendix B)
- East Entrance Alternatives:
 - Lemmon Avenue/George Coker Circle
 - Lemmon Avenue/Shorecrest Drive
- West Entrance Alternatives
 - Denton Drive
- Additional North Entrance Alternative
 - Shorecrest Drive entrance west of Runway 13R-31L

Additional Entry Options 2018



- 8 Shorecrest Drive west of Runway 13R-31L
- 9 Lemmon Ave/George Coker Circle Intersection
- 10 Lemmon Ave/Shorecrest Drive Intersection
- 11 Denton Drive

Next Steps

- Due to significant traffic volume changes on area roadways, staff has collected new traffic data
- The four newly identified alternatives are being analyzed using the new traffic data
- The previous seven (7) entry alternatives as well as the “do nothing” alternative will be re-evaluated using the new traffic data
- Staff will present the results of the analyses to the Committee with a recommended shortlist of alternatives for more detailed analysis in early 2020
- Subject to Committee approval, the shortlisted alternatives will be analyzed in finer details to rank them and select a preferred alternative, to be presented to the Committee in late spring/summer of 2020

Entry Alternatives to be Analyzed 2019



- 1 Conventional Urban Diamond Interchange
- 2 Diverging Diamond Interchange
- 3 Direct ramp Interchange
- 4 U-Turn at Airdrome Drive for traffic coming from west
- 5 Mockingbird Lane/Waddell Avenue
- 6 Shorecrest Drive
- 7 Bridge from Northwest Highway
- 8 Shorecrest Drive west of Runway 13R-31L
- 9 Lemmon Ave/Shorecrest Drive Intersection
- 10 Lemmon Ave/George Coker Circle Intersection
- 11 Denton Drive
- 12 Do Nothing

Dallas Love Field Good Neighbor Program & Alternate Entry Update

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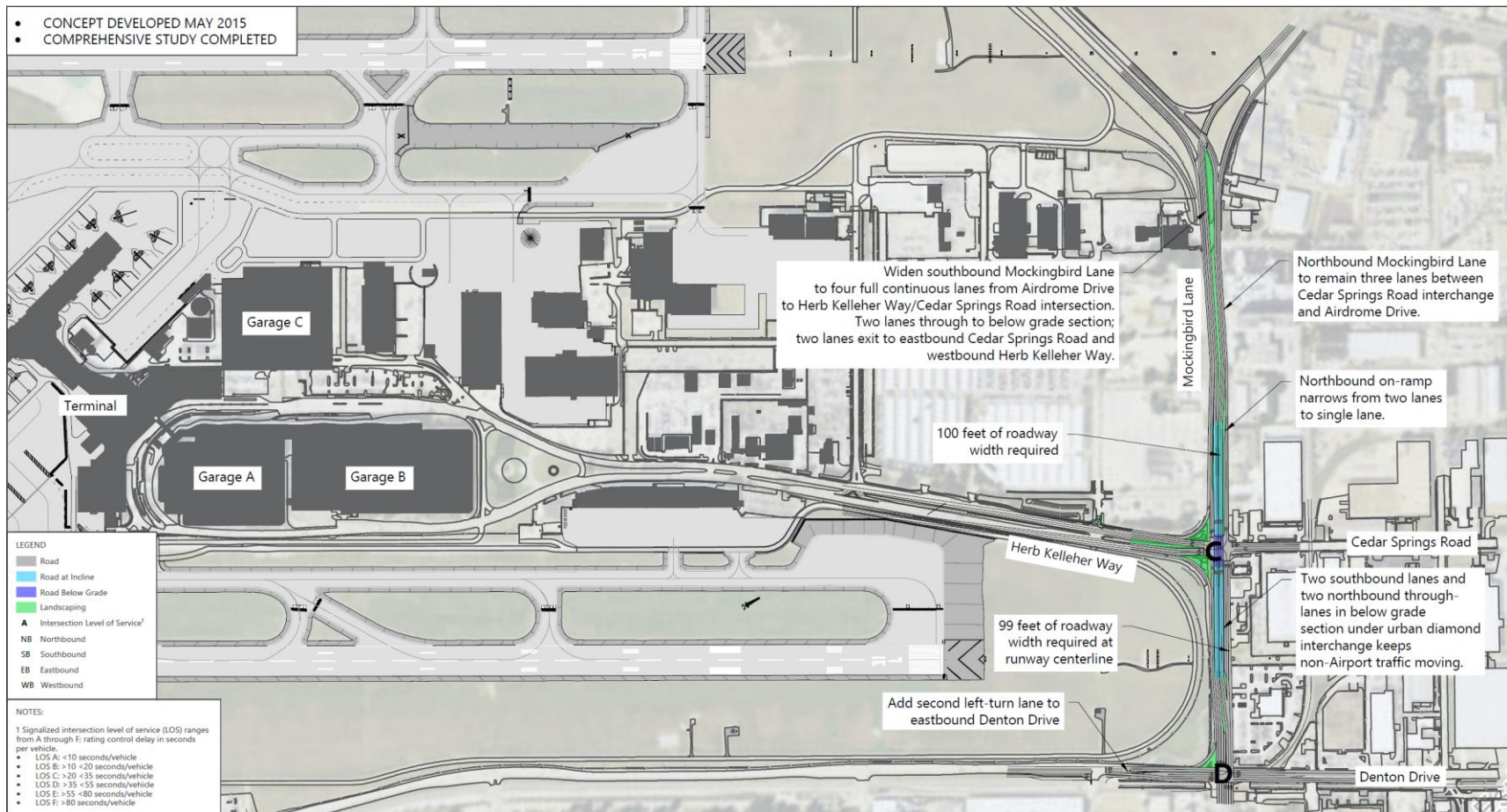
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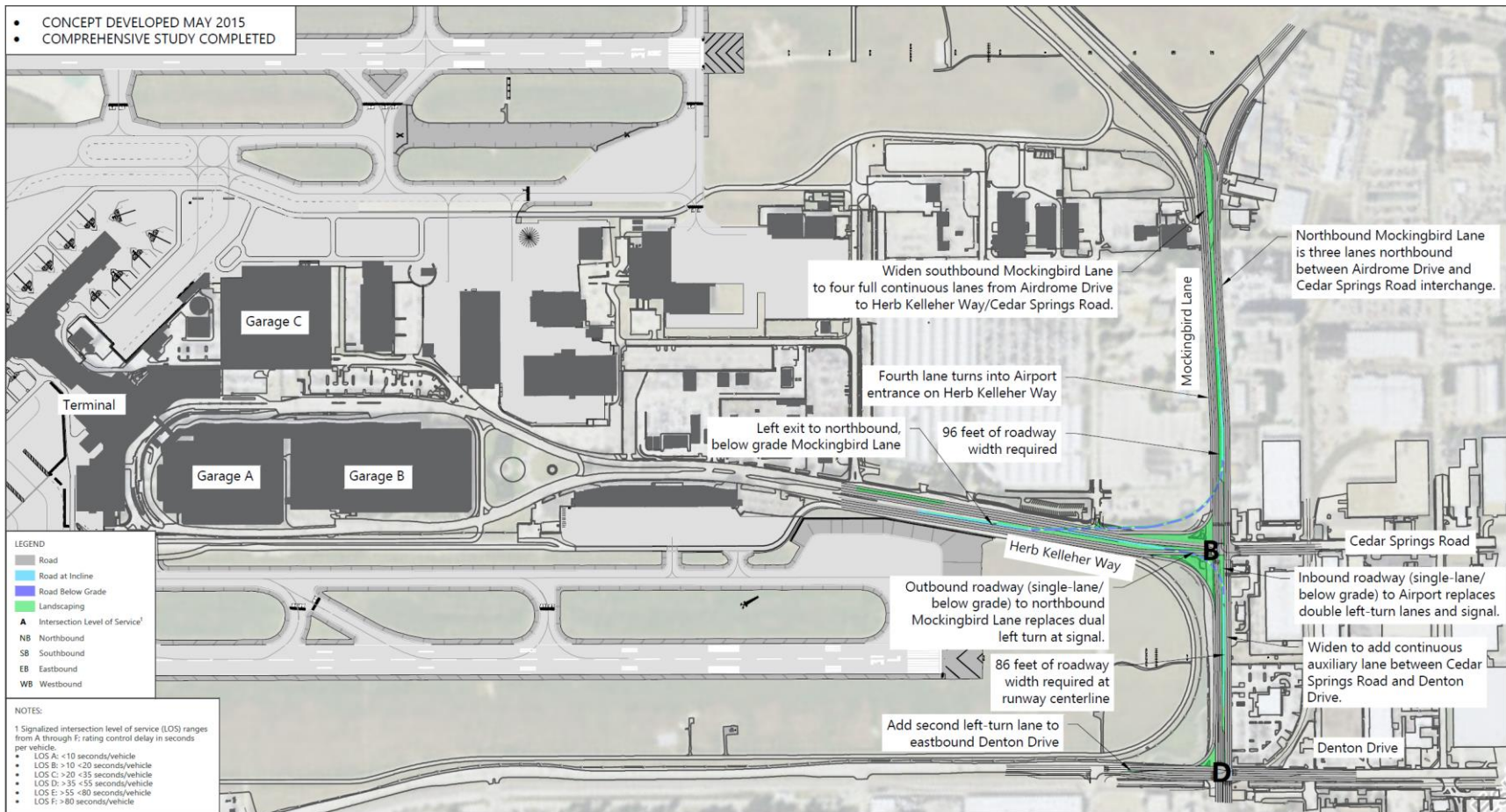
Appendix A



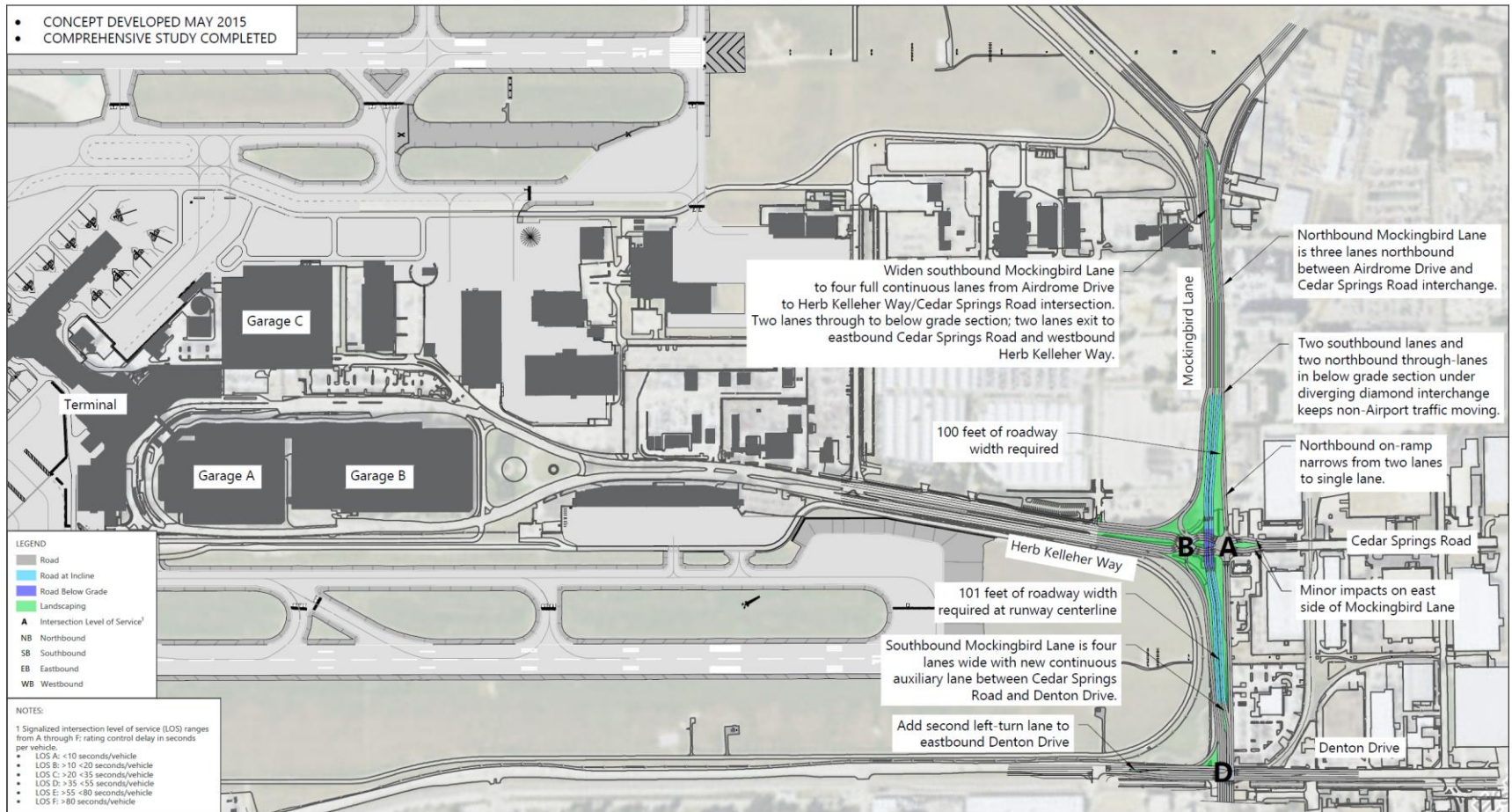
Compressed Conventional Urban Diamond Interchange



Direct Ramp Interchange



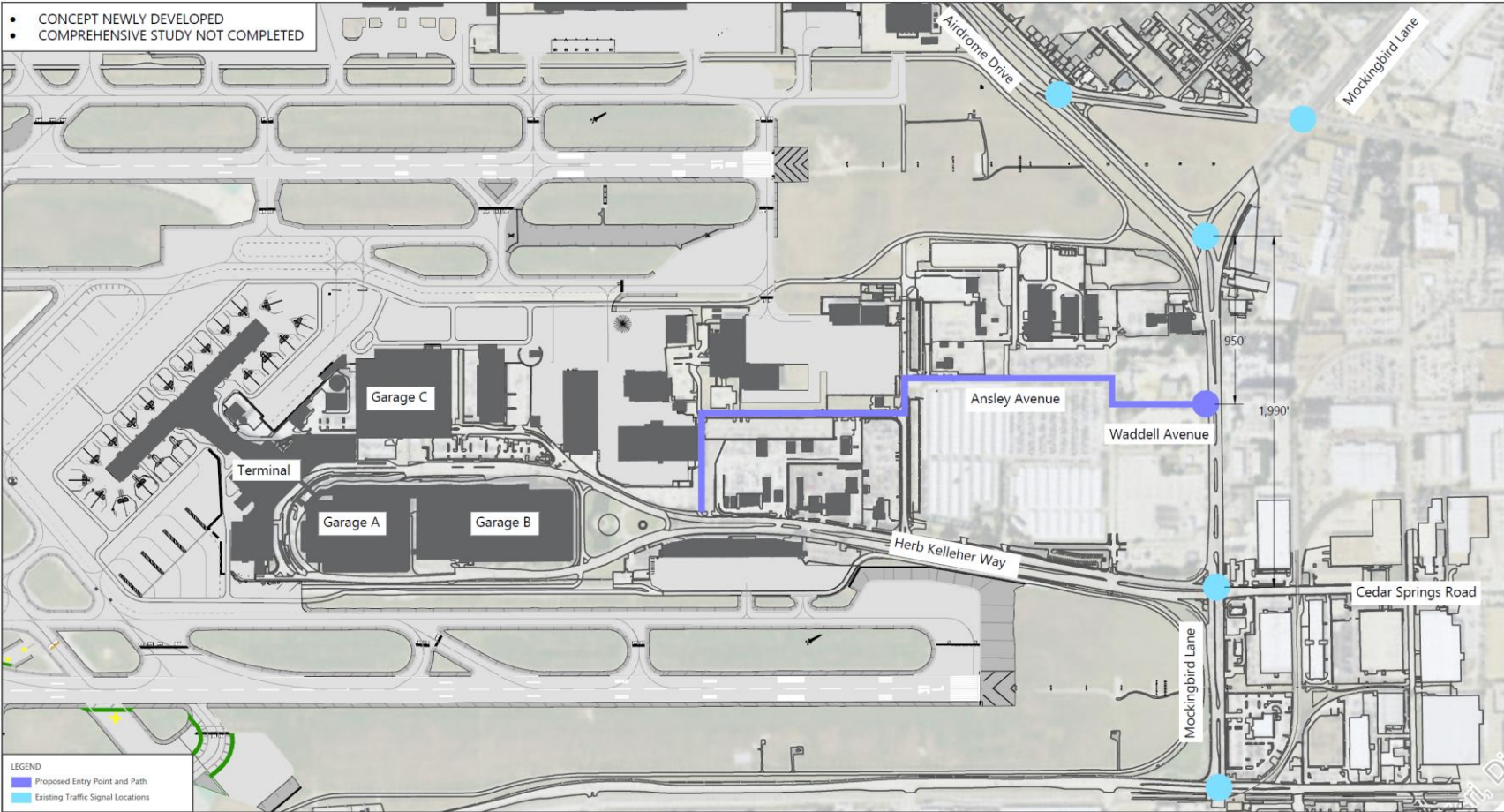
Diverging Diamond Interchange



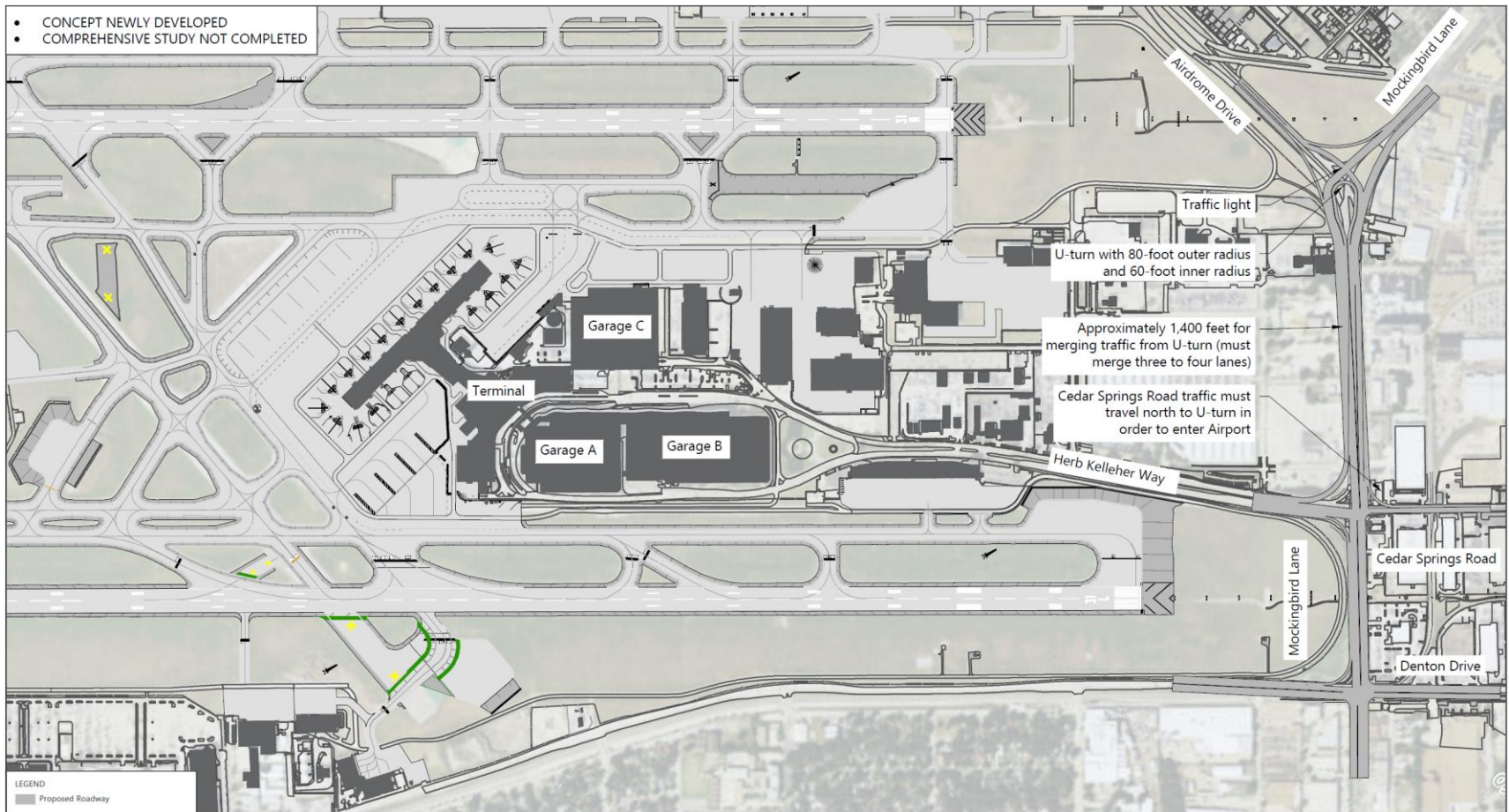
Appendix B



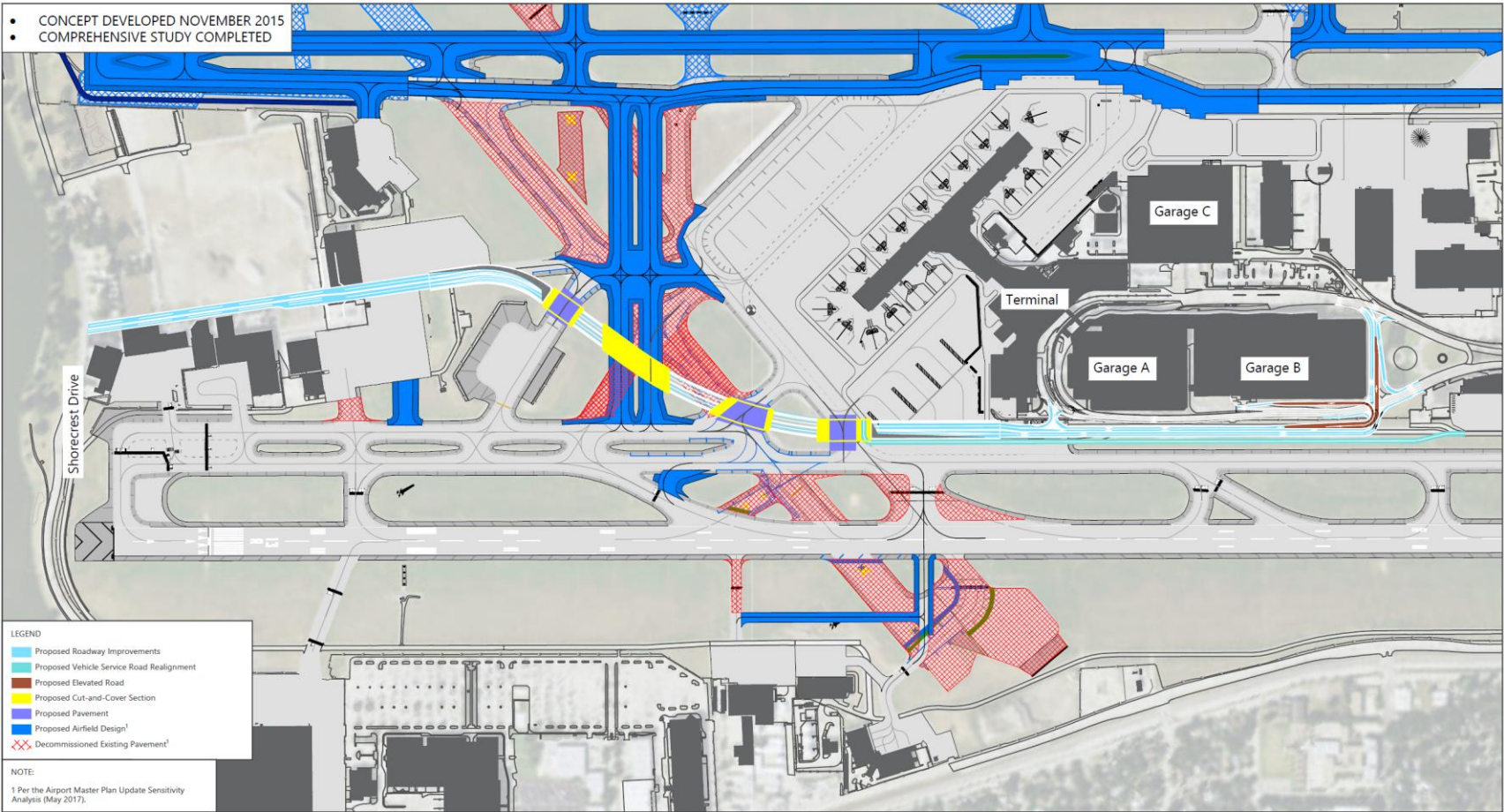
Waddle Avenue Entry



U-turn at Airdrome Drive



North Entry from Shorecrest Drive



North Entry from Northwest Highway

