

NCTCOG TRANSPORTATION DEPARTMENT

# BACHMAN LAKE AREA PLANNING STUDY

Virtual Public Meeting | 11.4.2021

# About NCTCOG

## The North Central Texas Council of Governments (NCTCOG)

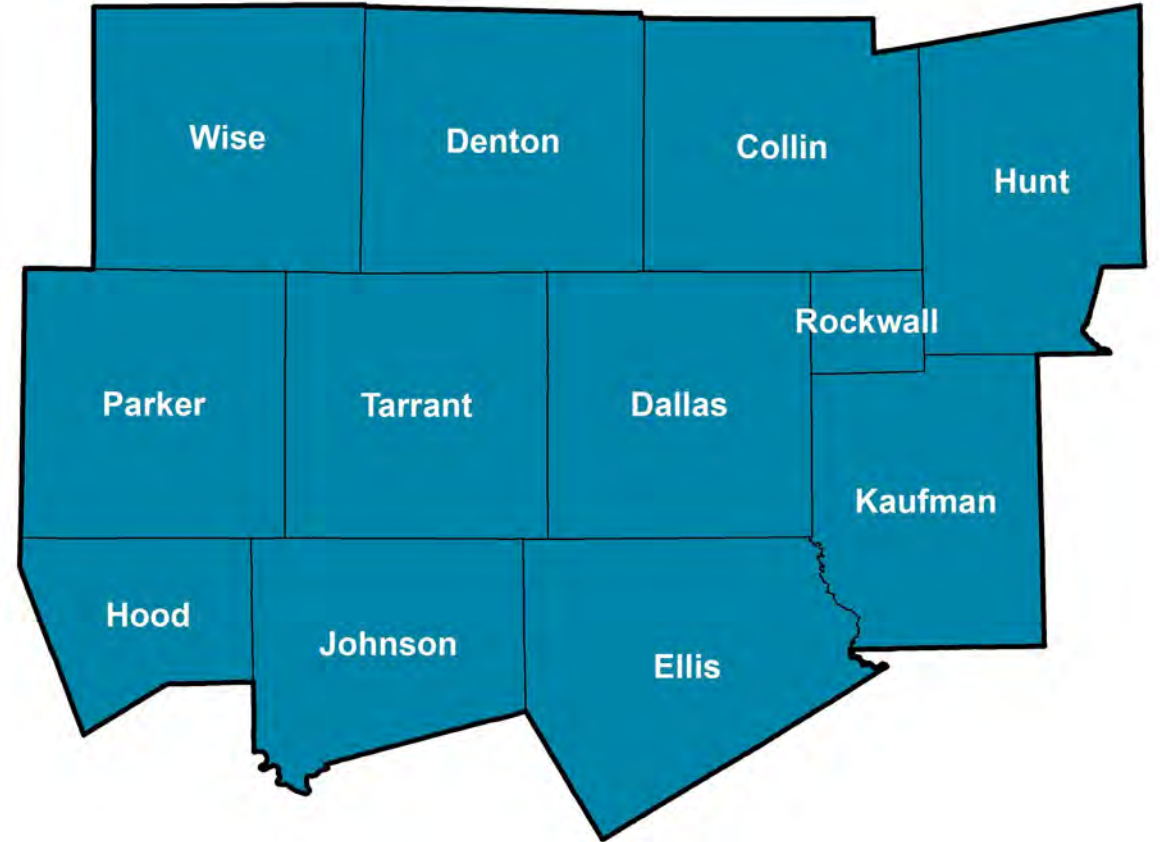
Metropolitan Planning Organization for the Dallas-Fort Worth region

## Regional Transportation Council (RTC)

Transportation actions  
Effectiveness and equity  
Funding of “projects and programs”

## Dallas Representation on RTC

City Council – 4  
Citizen Representatives – 2  
Dallas County – 2

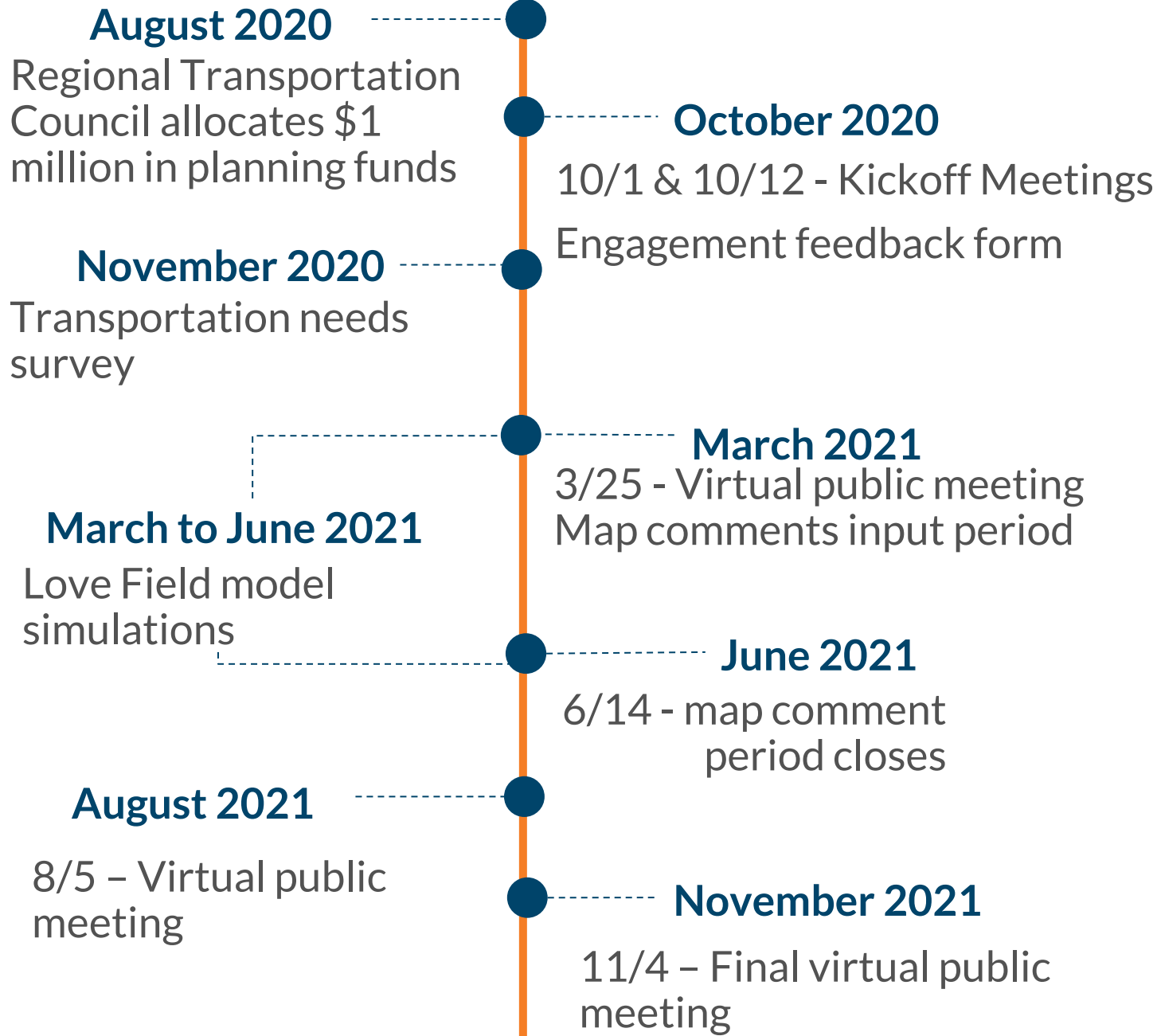




# NCTCOG Objectives

- Comprehensively advance **transportation safety** and access in the study area
- Identify ways to prioritize and improve safe **bicycle, pedestrian, and transit travel**
- Advise the City of Dallas on the **traffic impacts of different Love Field alternative entries** and propose solutions to **reduce traffic on Northwest Highway**
- Advance **economic development** and **recreation opportunities** through possible redesign of Northwest Highway
- Following through on ten ideas from beginning of planning project

# Activities to Date



# Meeting Agenda

- Background on ten project ideas
- Recommendations
- Next steps
- Discussion

# Background on Ten Project Ideas

Will present recommendations/  
summary of ideas in this  
presentation

**Order of presentation will differ  
from this list**

Additional information for each  
summarized at:

[NCTCOG.org/BachmanArea](http://NCTCOG.org/BachmanArea)

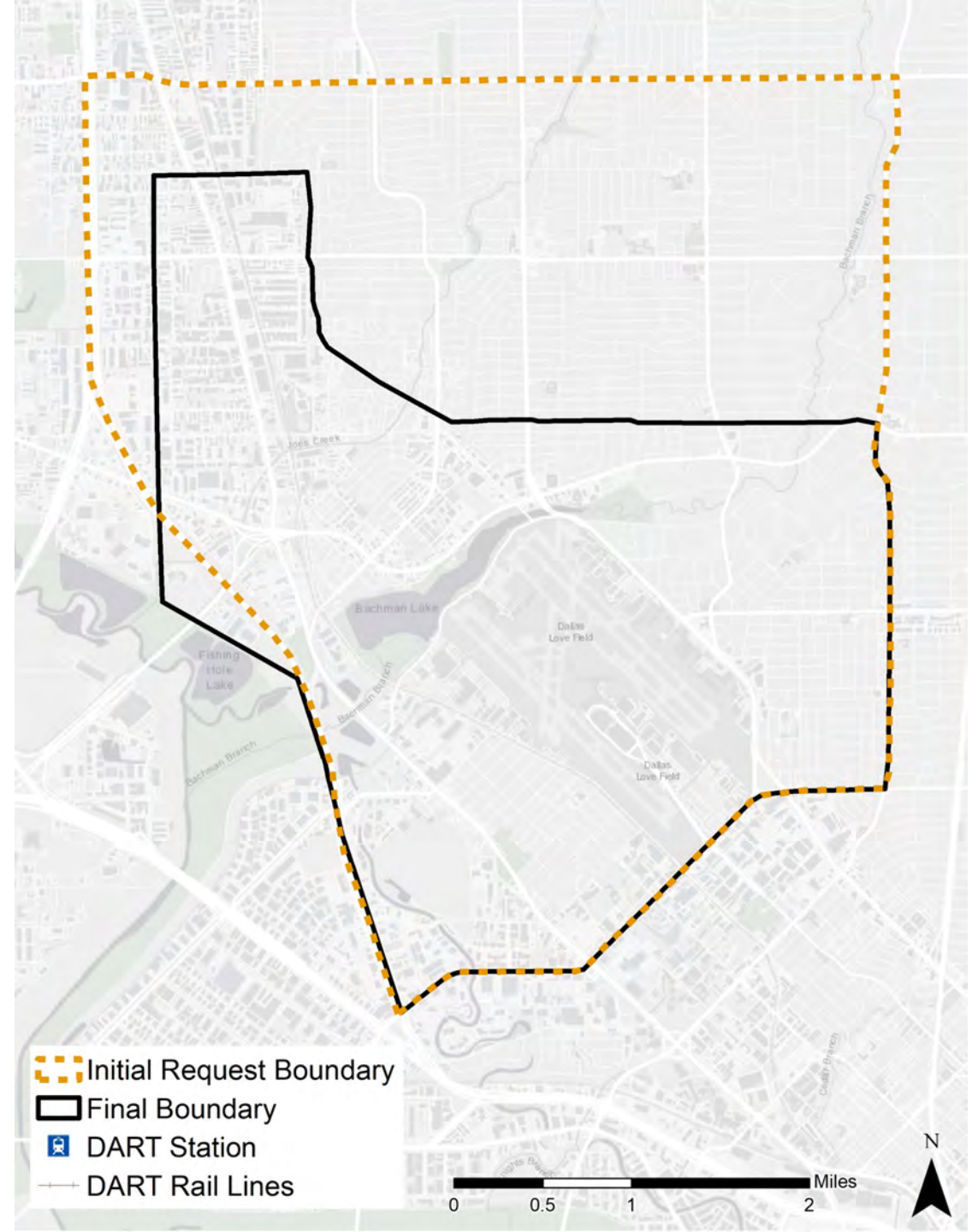
| Idea                             |
|----------------------------------|
| 1. City of Dallas Coordination   |
| 2. TxDOT Coordination            |
| 3. Love Field Access             |
| 4. Study Area Refinement         |
| 5. Public Involvement            |
| 6. Economic Development          |
| 7. Trails and Parks Access       |
| 8. Depress NW Hwy/Pedestrian Cap |
| 9. Harry Hines Blvd              |
| 10. DART Coordination            |

# Study Area Refinement [#4]

The following factors were considered:

- Existing trail network
- DART rail stations
- Other ongoing projects
- Environmental justice factors
- Safety data

For a more detailed explanation, see [Study Area Refinement Memo](#) on website



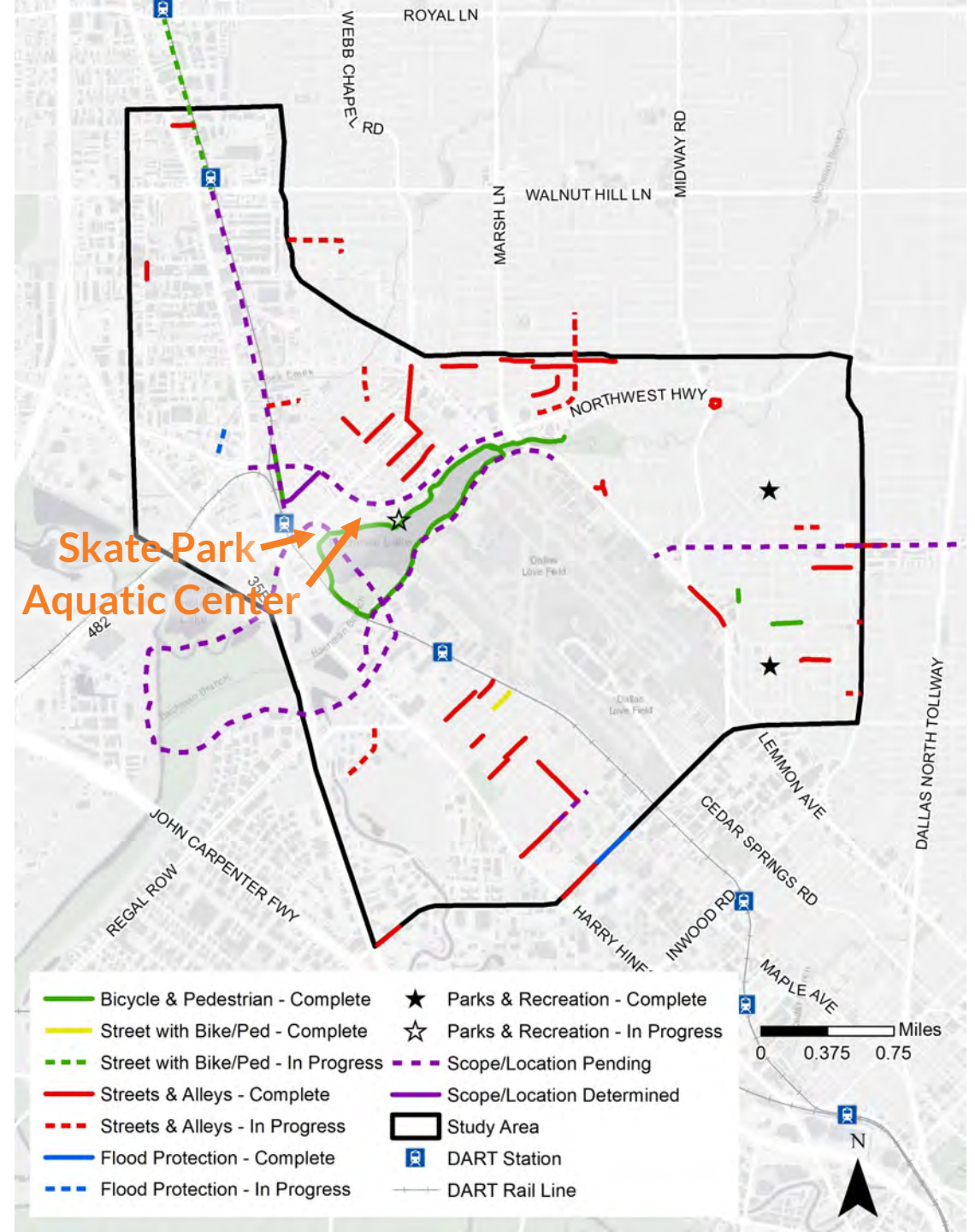
# City of Dallas Coordination [#1]

## Bond Projects

- 40 total 2012 and 2017 bond projects study area. 14 projects remain in progress (design/construction)
- Recommend future bond funding include more resources for community needs and planning recommendation implementation

## Dallas County Major Capital Improvement Project (MCIP) 7<sup>th</sup> Call

- 7 projects in study area (early stages)
- Finalize pending implementation projects





# Public Involvement [#5]

## Efforts to gather feedback throughout the project:

Survey & Feedback Form

408 total responses

Interactive Map

262 comments received

207 supporting votes

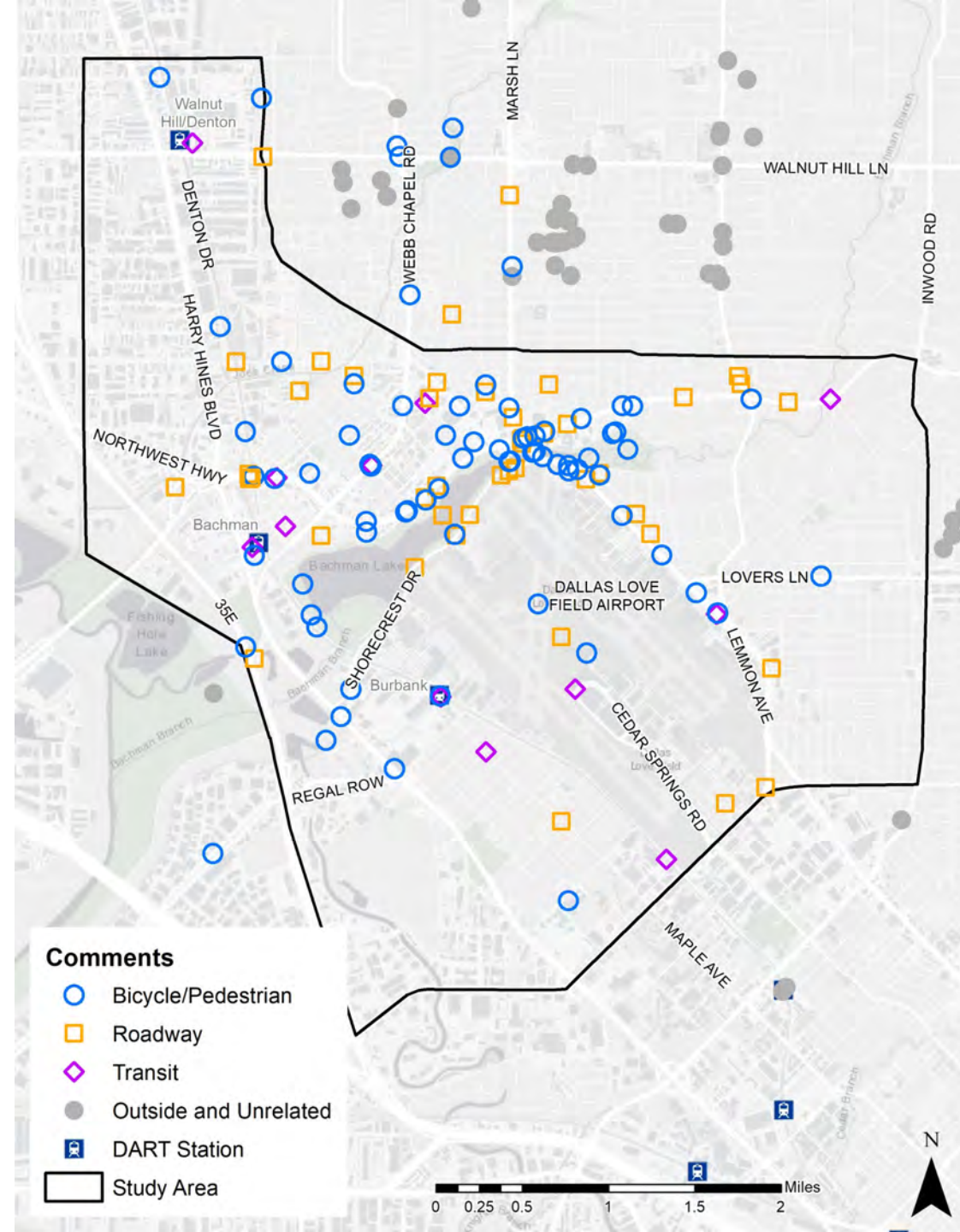
Public Meetings

4 virtual meetings held

August/November Meeting Feedback

114 responses for 8/5/21 meeting

Today's meeting will have comment options



# Public Involvement [#5]

Response Form (August 5, 2021 Meeting)

114 responses

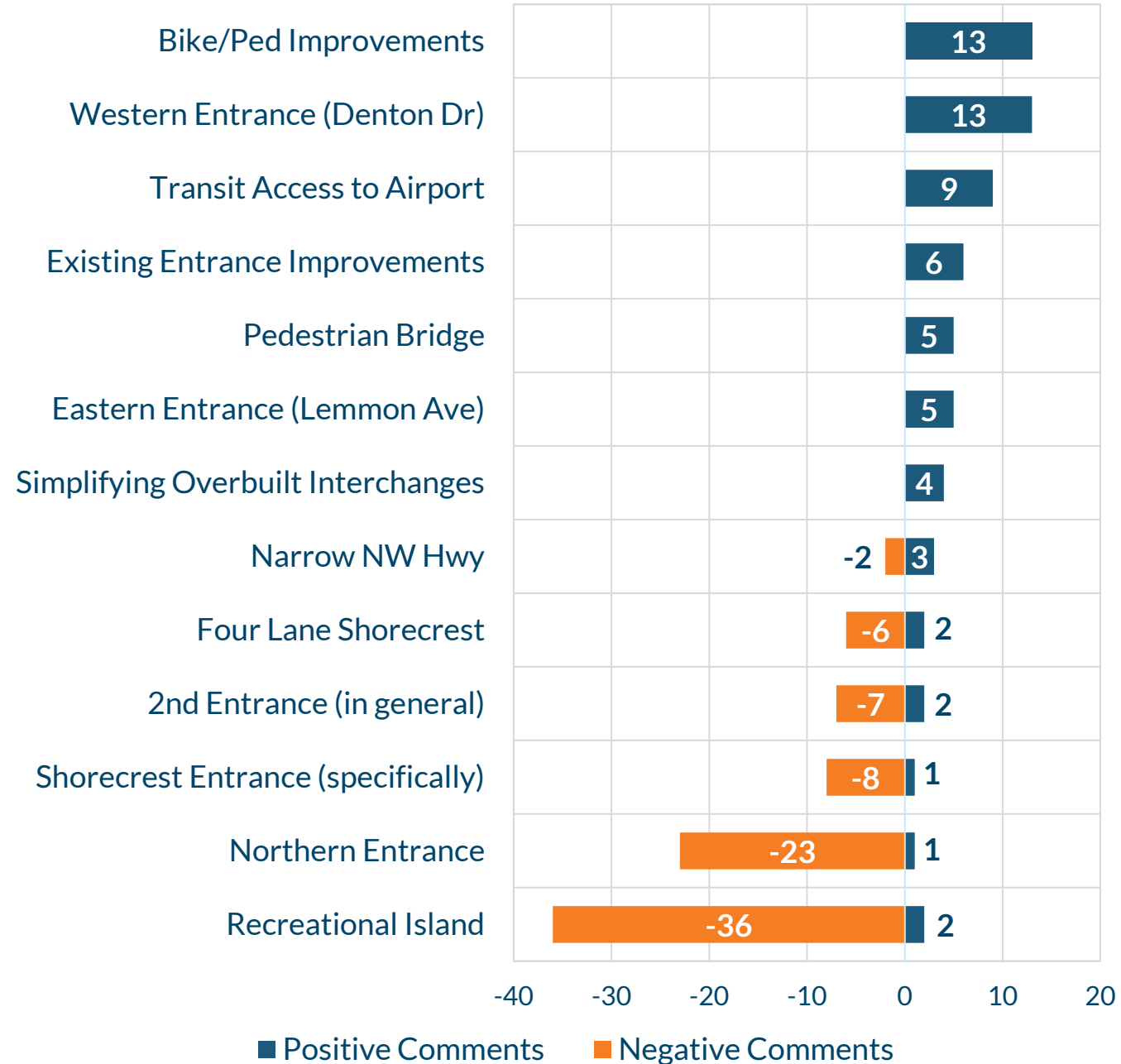
Most popular ideas:

- Bicycle/pedestrian improvements
- Western airport entrance
- Transit access to airport

Least popular ideas:

- Recreational Island
- Northern entrance
- Shorecrest entrance, specifically

## Idea Popularity



# Bicycle/Pedestrian Needs [#7]

Safety analysis – crash data presented at March 2021 public meeting

From public comments and surveys:

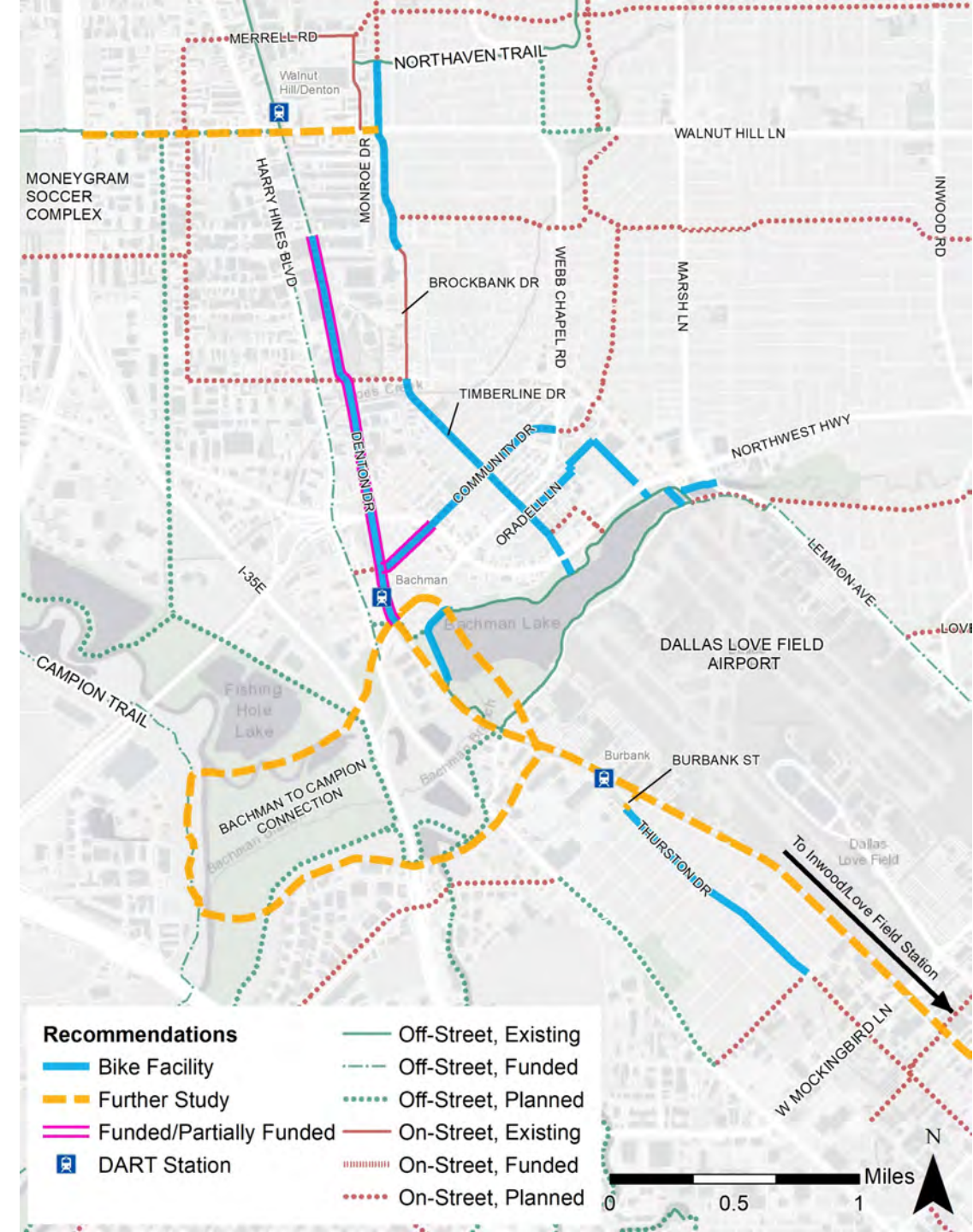
- New **sidewalks and trails** are needed for bicyclists and pedestrians along with upgrades to existing facilities to improve safety and accessibility.
  - **76%** of survey respondents ranked increasing the number of and access to bike facilities as important
- **Major street crossings** are needed to enhance safety and connect areas (crosswalks, signals, etc.).
  - **79%** of survey respondents indicated difficulty safely crossing roads as a concern
- **Traffic speed and visibility** are issues to address to improve safety.
  - **70%** of survey respondents indicated slowing traffic in their neighborhood for safety as a concern

# Trails and Parks Access

[#7]

## Bicycle Facilities Recommendations

- 6.6 miles of recommended bike facilities
- 4.5 miles of recommended further study (possible facilities, questions regarding alignment, facility type, or overall feasibility)



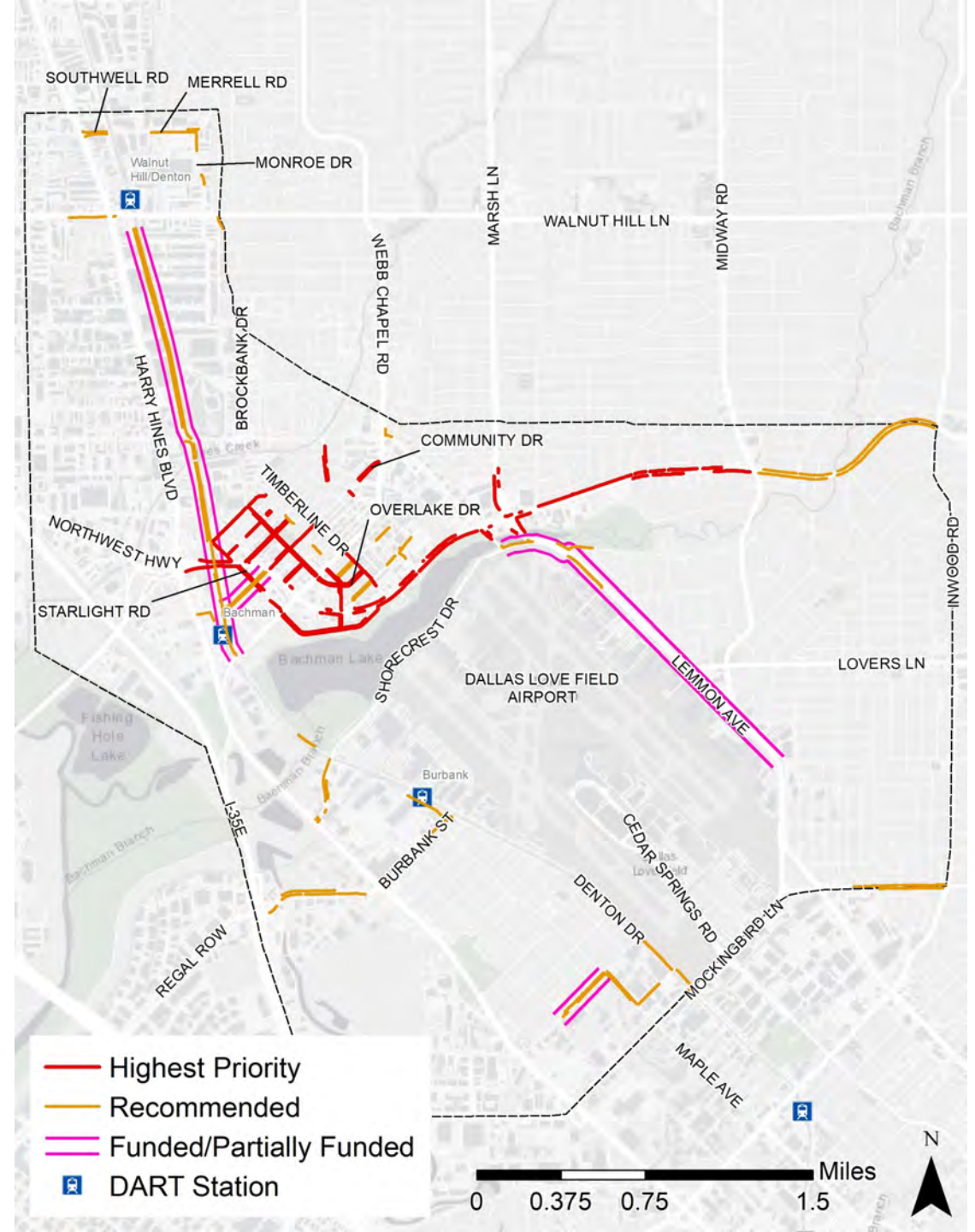
# Trails and Parks Access

[#7]

## Sidewalk Recommendations

19 miles of recommended sidewalks

- 8.3 miles are high priority (constructed first if funding is limited)



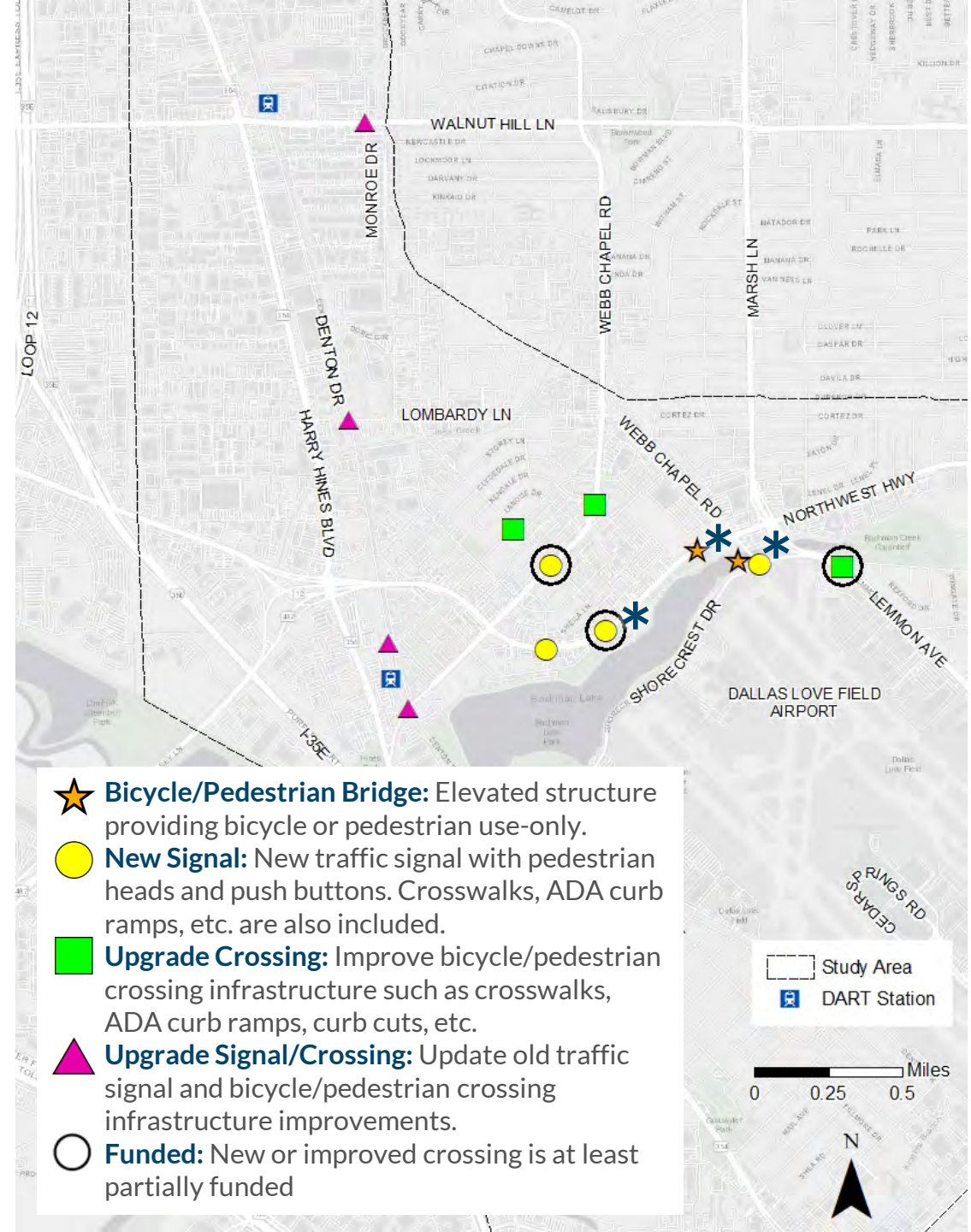
# Trails and Parks Access

## [#7]

### Intersection/Crossing Recommendations

**13 locations** recommend for improvement

\*Recommend significant ongoing intergovernmental coordination critical intersections



A Southwest airplane is flying in the sky above a park. The park features a large lake in the foreground with a person in a small boat. The background is filled with lush green trees. The text is overlaid on this scene.

# Roadway Related Enhancements

**#9 Harry Hines Study**








**#8 Depress NW Hwy/Pedestrian Cap**

**#2 Team TxDOT**

**#3 Love Field Access**

# Area Transportation Studies



-  Love Field Modeled Entries
-  Love Field Spot Improvement Analysis
-  TxDOT Northwest Highway Study  
<http://www.keepitmovingdallas.com/northwesthighway>
-  NCTCOG Harry Hines Transportation Master Plan
-  Love Field Loop Trail/ Lemmon Ave
-  DART Automated Bus Pilot to Inwood/Love Field Station
-  NW Hwy Context Sensitive Focus Area



# Harry Hines Boulevard Transportation Master Plan [#9]

## Progress Update

**Goal:** Develop a Transportation Master Plan based on a context sensitive approach with modern engineering concepts to provide multimodal transportation options and support anticipated land uses.

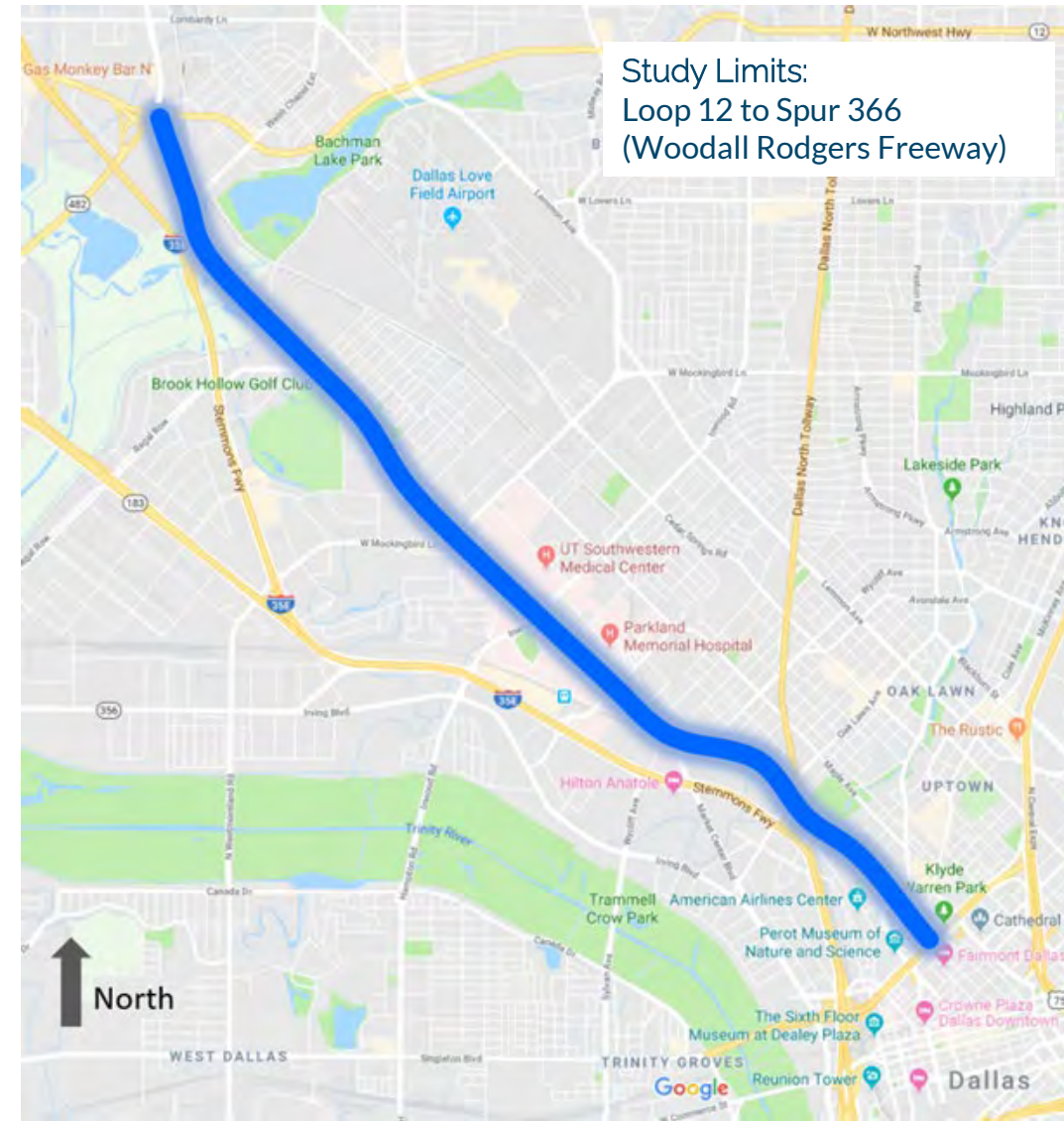
### Major Tasks:

- Existing Conditions Analysis (including transit/shared ride/ bicycle/pedestrian accommodations, safety, land uses, traffic congestion, previous and related studies)
- Alternative Development (including conceptual intersection designs at Loop 12, Webb Chapel Extension, Mockingbird Lane, Market Center)
- Conceptual Roadway Design and Operations
- Urban Design
- Upcoming Meetings and Public Involvement (Spring 2022)

**Major Deliverables:** Final report, conceptual (5%) design, draft access management plan, construction cost estimates

**Schedule:** August 2020 to August 2022

The study efforts are being coordinated with the City of Dallas, DART, TxDOT, NTTA, Dallas County, and Texas Trees Foundation.



# Loop 12 Northwest Highway [#8]

*"Land Bridge" Proposal:  
Bachman Lake Park – North  
Neighborhood Park  
Connection*

**DRAFT**

## Similar project examples:

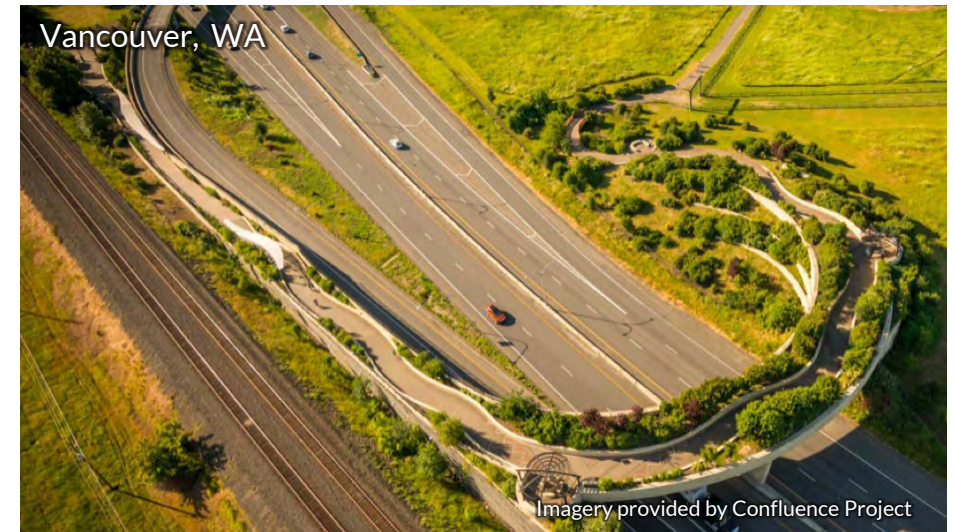
- San Antonio, TX  
Phil Hardberger Park
- San Francisco, CA  
US 101 Presidio Parkway
- Saint Louis, MO  
Gateway Arch ("Park Over the Highway")
- Houston, TX  
Memorial Park ("Land Bridge and Prairie" Project)



# Land Bridge/Pedestrian Cap/Deck Park Example Ideas [#8]

Needs to conform to aviation height restrictions

Significant engineering feasibility needed



**LOVE FIELD SHORECREST ENTRY**

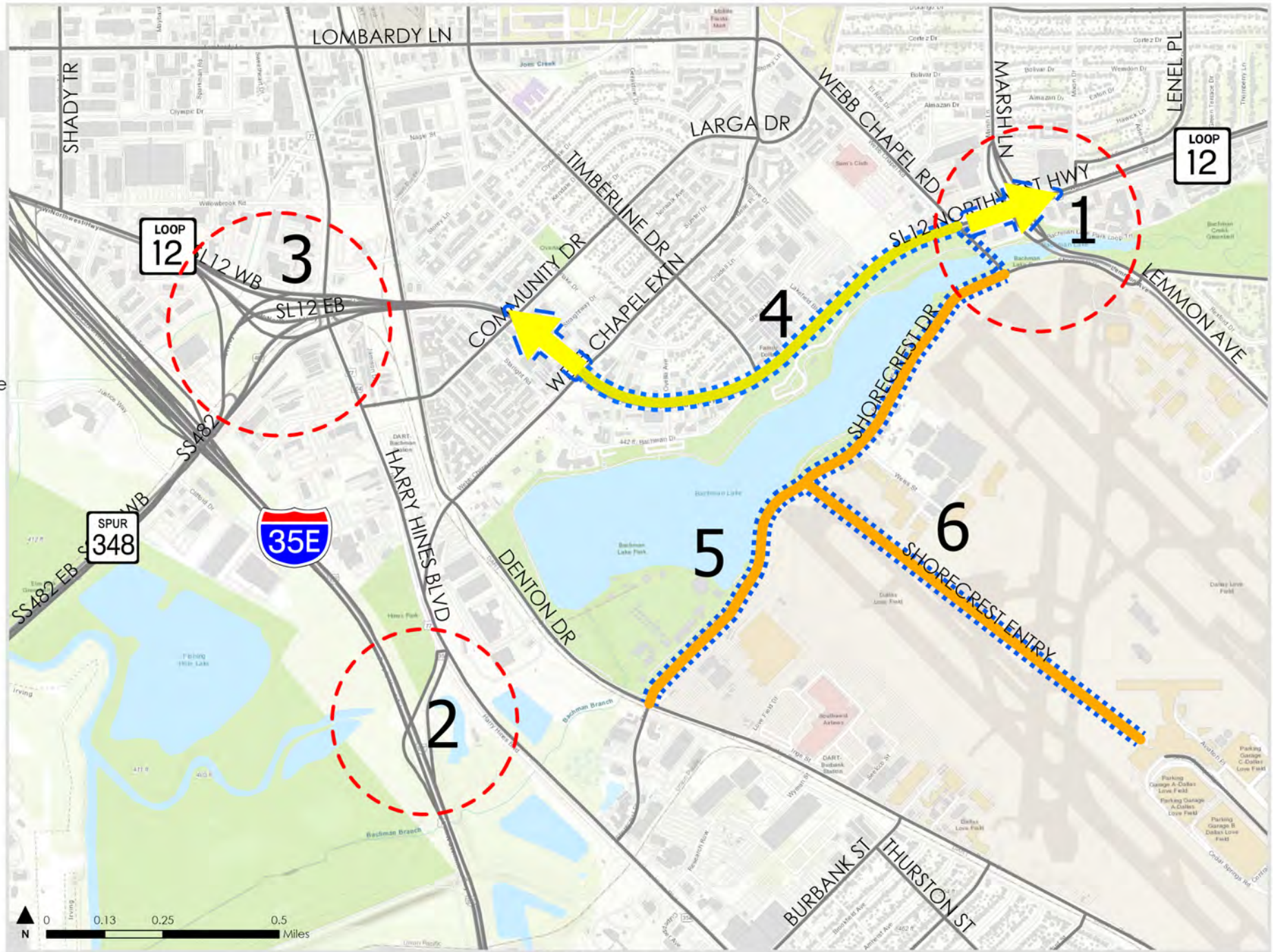
**Potential Roadway Improvements**  
**DRAFT DOCUMENT** (October 2021)

Potential roadway improvements around the Love Field Airport based on Mobility 2045 Metropolitan Transportation Plan roadway network.

**Legend**

-  Shorecrest Entry
-  Northwest Hwy Lane Reduction
-  2045 Roadway Network
-  Potential Interchange Improvements
-  Potential Roadway Improvements

TxDOT  
 [#2]

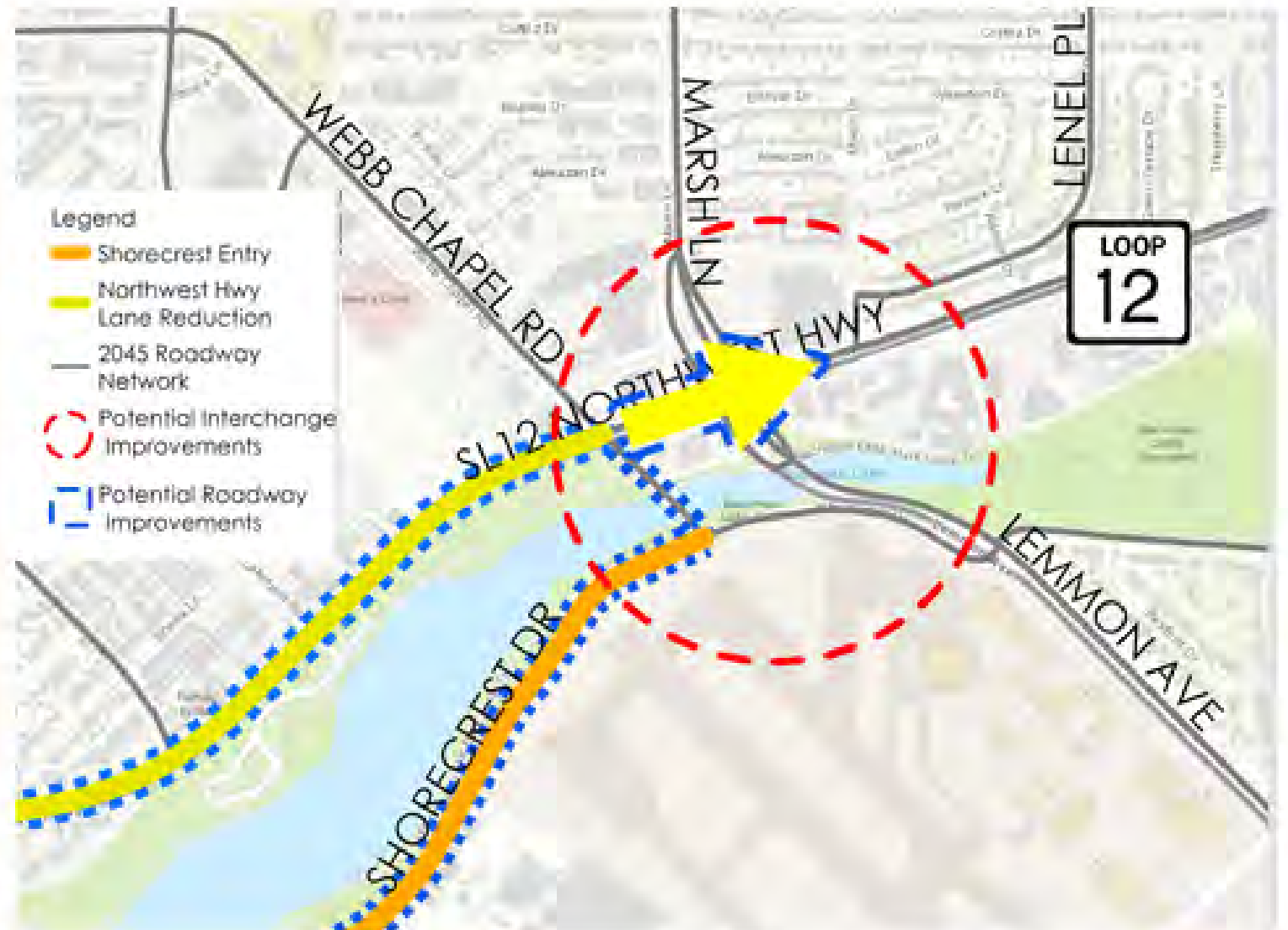


# NE Airport Corner Interchange Reconstruction

**GOAL:** How to reduce bottlenecks at closely-spaced intersections AND add Love Field access via Shorecrest?

Possible design options (some concepts could be combined):

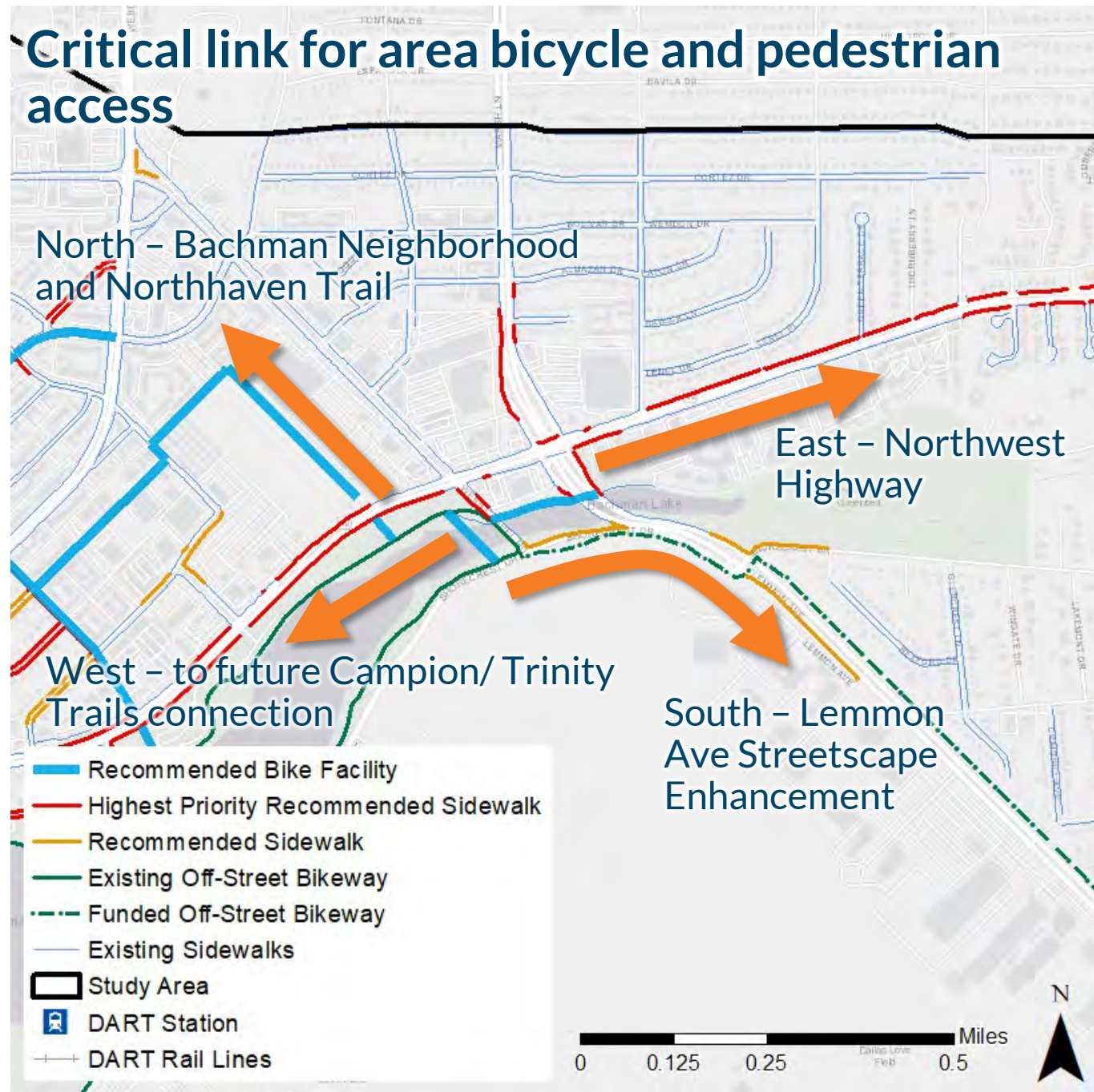
- A. Rebuild Webb Chapel bridge with enhanced capacity and connectivity.
- B. Rebuild the Marsh/Lemmon bridge and Loop 12 interchange with enhanced capacity and connectivity.
- C. Revise Marsh/Lemmon ramps to/ from Loop 12 with relocated Lemmon/Shorecrest signalized intersection.
- D. Connect Shorecrest to Loop 12 with Marsh / Lemmon grade separation and ramp configurations to avoid added signalized intersections.
- E. Add Love Field Loop Trail to travel under Lemmon and Webb Chapel bridges.



# Webb Chapel Road Bridge [#7]

Significant public input on inadequate and unsafe bicycle/pedestrian facilities on existing bridge

**Additional study needed for various options on to best add bicycle and pedestrian access.**



# IH 35E / Raceway Interchange and Harry Hines Intersections

**GOAL:** How to provide efficient Love Field access (via Shorecrest) while ALSO reducing Loop 12 traffic?

- A. Reconstruct IH 35E / Raceway interchange to include entrance and exit ramps in both directions.
- B. Realign Harry Hines intersections at Raceway and Webb Chapel with improved geometry to optimize signal timing for turning movements.
- C. Incorporate bicycle / pedestrian accommodations facilitating future Campion Trail connection.



# Loop 12 / Spur 482 / Harry Hines Interchange Reconstruction

**GOAL:** How to simplify roadway connectivity, add developable land access, address flooding vulnerabilities, AND reduce Loop 12 traffic at Bachman Lake?

- A. Reconstruct Loop 12 / Spur 482 / Harry Hines interchange with streamlined design and less surface area.
- B. Reduce access controls to benefit connectivity and circulation for adjacent developable land.



- Legend
- Shorecrest Entry
  - Northwest Hwy Lane Reduction
  - 2045 Roadway Network
  - Potential Interchange Improvements
  - Potential Roadway Improvements



**LOVE FIELD ALTERNATE ENTRY**

**Alternative Entries Evaluation**  
**DRAFT DOCUMENT** (October 2021)

2045 Roadway Network

Legend

- Modeled Entries
- 2045 Roadway Network

**Alternatives Evaluation**

1. Northwest Highway - Central Airfield
2. Shorecrest Drive - Central Airfield
3. Shorecrest Drive – West of Runway 13R-31L
4. Lemmon Avenue/Shorecrest Drive
5. Lemmon Avenue/George Coker Circle Tunnel
6. Denton Drive
7. U-Turn at Airdrome
8. Mockingbird Lane/Waddel Avenue
9. Conventional Urban Diamond Interchange
10. Diverging Diamond Interchange
11. Direct Ramp Interchange



Tunnels

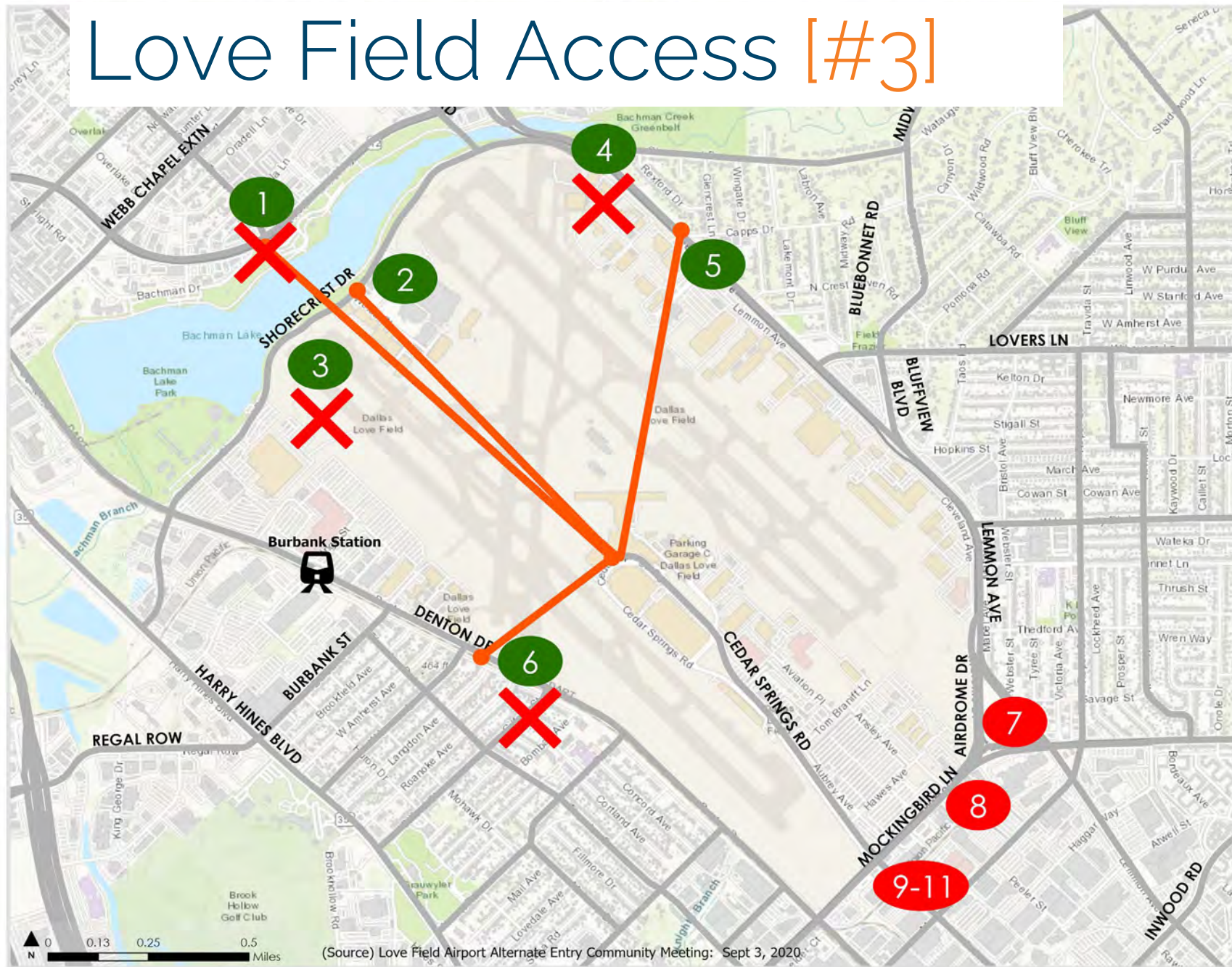


Spot Improvements



North Central Texas  
Council of Governments

# Love Field Access [#3]



(Source) Love Field Airport Alternate Entry Community Meeting: Sept 3, 2020

# Alternate Entry Public Concerns

- Why is an alternate entry necessary for Dallas Love Field?
- Why are the Denton Dr and Lemmon Ave entrances infeasible?
- Why is an improved southern entrance on Mockingbird infeasible?
- Is an emergency-only northern entrance possible instead of a regular-use entrance?
- How would a four lane Shorecrest Dr impact Bachman Lake? Noise impact?
- What is the feasibility and cost of improvements for the different alternate entrance alternatives?

# Denton Drive Critical Impacts

- Automated People Mover (APM) and/or roadway implementation not possible:
  - Runway not designed to accommodate tunneling a roadway under the facility
  - Greater than 8% vertical grade
  - Excessive roadway horizontal curves necessary for transition from below grade to main terminal
  - Land constraints, airport no longer owns available land along Denton Dr
  - DART Green/Orange Lines and Burbank Station limit options for an entry intersection on Denton
  - Significant and lengthy disruptions to runway capacity and airfield operations during construction (reviewing Addison Airport tunnel construction method)
- RTC funded (\$1,750,000) in autonomous vehicles from the Inwood/Love Field station to the main terminal
- Airport pursuing APM options from north and east

# LOVE FIELD SHORECREST ENTRY

## Shorecrest New Interchange Entry Volume Difference DRAFT DOCUMENT (July 2021)

Shorecrest coded as 2 lanes in each direction between Lemmon Ave and Denton Drive. Volume Difference below 400 trips not shown.

### Legend

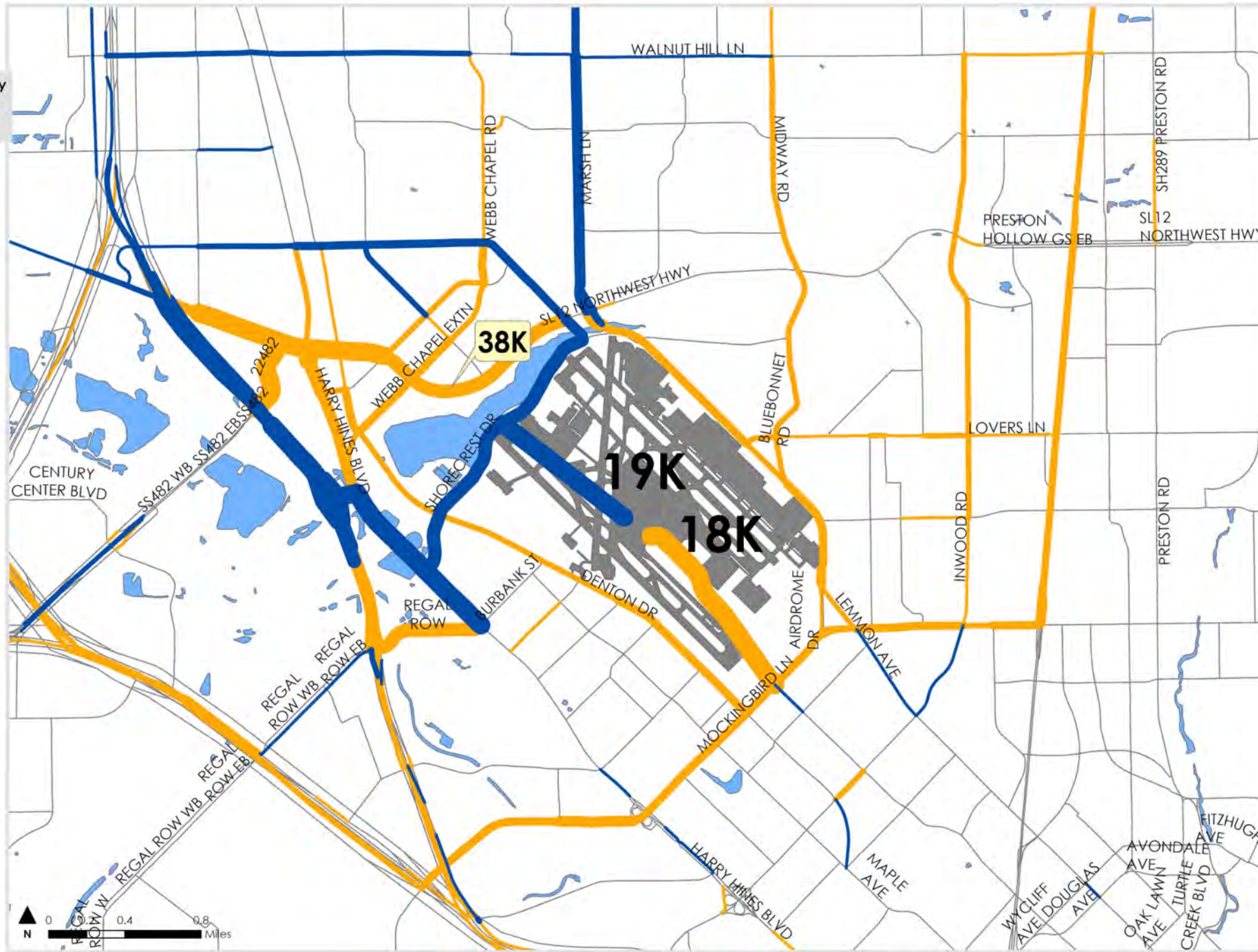
#### Daily Volume Increase

- 400-800
- 800-2,000
- 2,000-4,000
- 4,000-8,000
- 8,000-12,000
- 12,000-55,000

#### Daily Volume Decrease

- 400-800
- 800-2,000
- 2,000-4,000
- 4,000-4,000
- 4,000-12,000
- 12,000-19,000

— Roadway Network



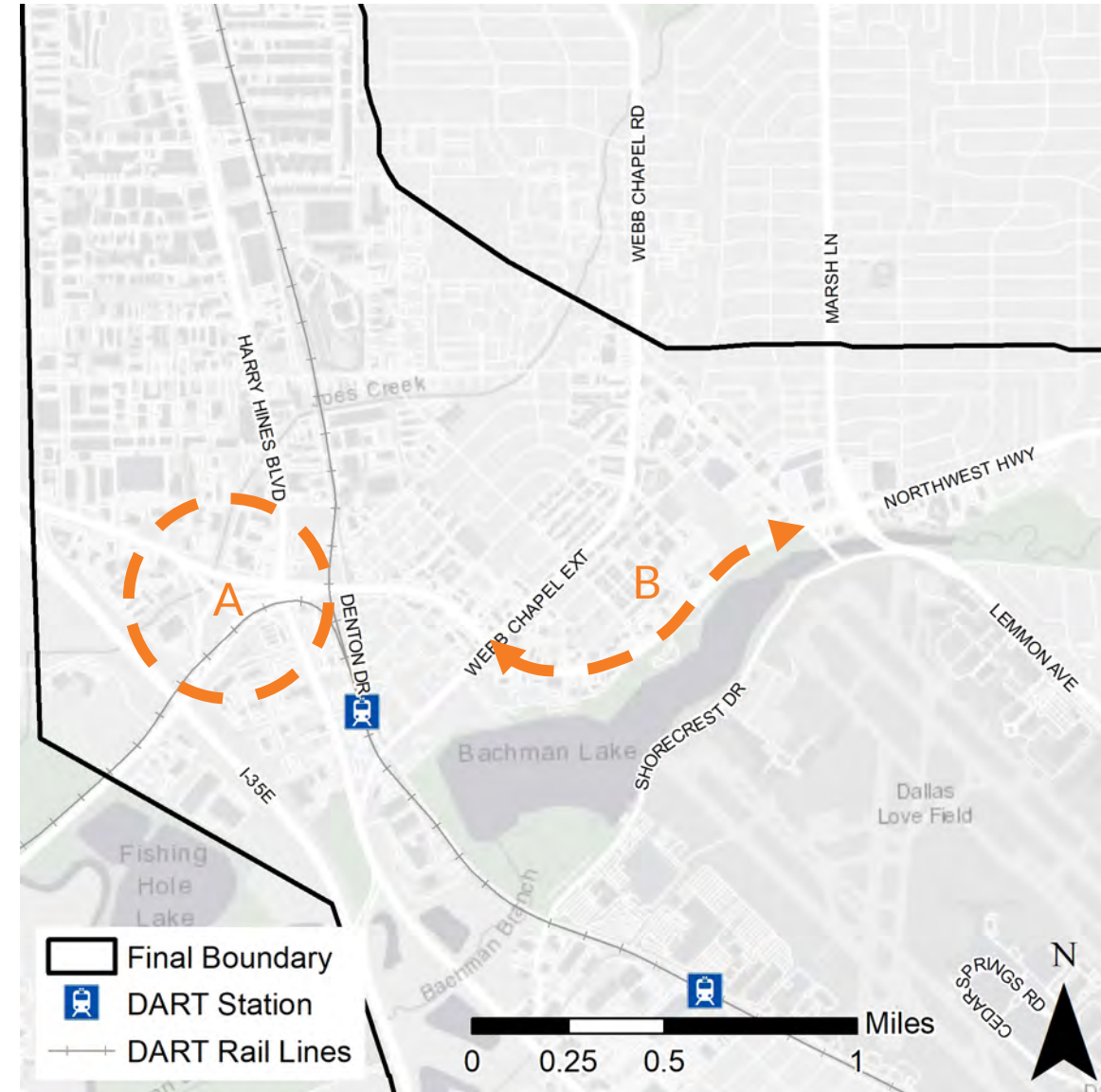
# Alternate Entry Analysis Conclusions

- Recommend Shorecrest Dr entry, attracting 18k-19k daily trips
- Widening Shorecrest Dr from 2 to 4 lanes and reducing Northwest Hwy from 6 to 4 lanes provides better balance for the community
- Modified IH 35E interchange at Raceway/Harry Hines reduces congestion on Northwest Hwy, Webb Chapel, and sections of Harry Hines
- Interchange improvement at Northwest Hwy, Harry Hines, and Spur 482 (Storey Ln), along with Northwest Hwy lane reduction, provides significant congestion relief and economic development opportunities
- DART and City of Dallas pursuing additional transit access from north to complement RTC funded access from the south

# Economic Development [#6]

Pedestrian friendly design on Northwest Highway may increase area potential and quality of life

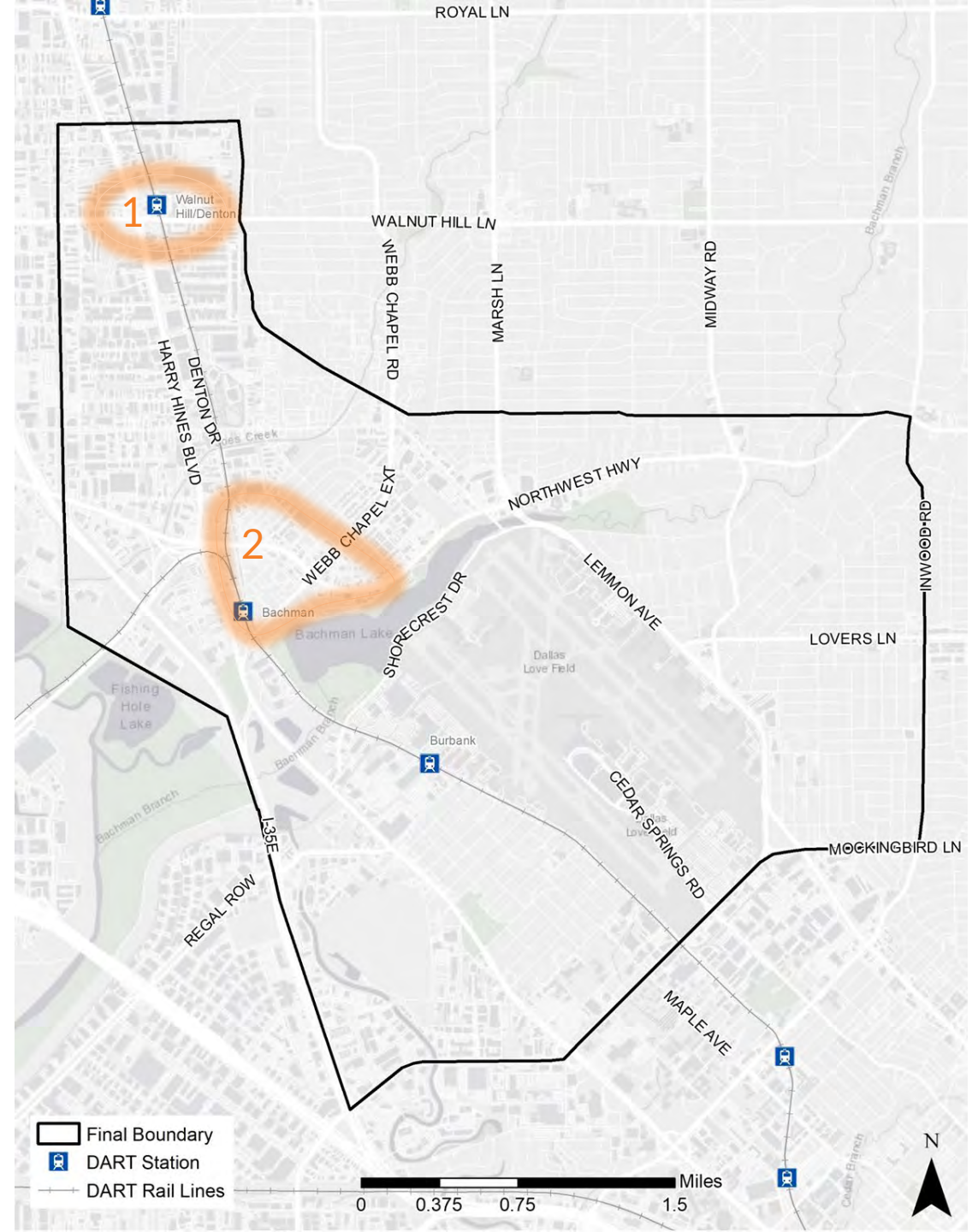
- A. Interchange simplification
  - Calms traffic
  - Smaller infrastructure maintenance cost
  - Opportunity for catalytic land use/ recreation
- B. Four lane Northwest Highway
  - ~50% of survey respondents were in favor of reducing the number of lanes on NW Hwy
  - Research indicates that reducing lanes can improve economic conditions of businesses located along a corridor<sup>1</sup>
  - Four lanes creates space for pedestrian friendly design



# Economic Development [#6]

Recommended future development opportunity focus areas:


1. Walnut Hill/Denton Station Area
2. Bachman Neighborhood/Bachman Station Area
  - Low-value buildings on higher value land
  - Expansive parking lots
  - Vacant lots
  - Transit station access
  - Environmental justice area of need




# Transit Projects [#10]

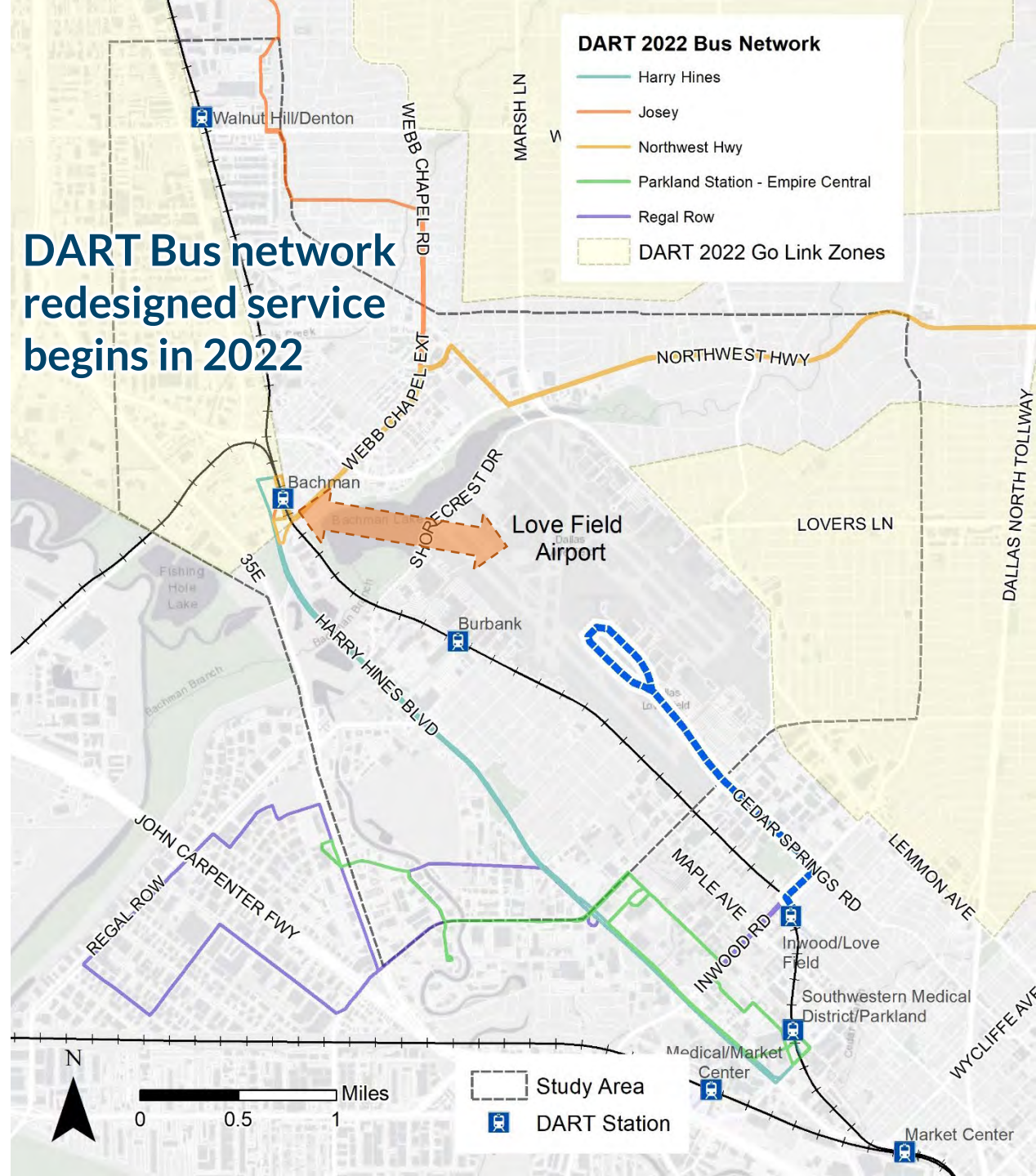
*“What are the transit options for Love Field access? Will transit be incorporated into the new entrance?”*

Two projects to improve Love Field Connection

 Love Link Automated Bus Upgrade DART route 524

- Regional Transportation Council approved \$1,750,000 in four automated vehicle (AV) electric buses in 2024 or 2025

 Second Entry Transit Technology Study led by Aviation Dept. at the request of City of Dallas Transportation Committee





# Next Steps

## 1. City of Dallas Coordination

- City to meet frequently with Dallas County to advance MCIP bond projects (City)

## 2. TxDOT Coordination

- Complete NW Highway Feasibility Study – Inwood Road to Hillcrest Drive (TxDOT)
- Redesign of Loop 12/Spur 482/Harry Hines Boulevard interchange (TxDOT)
- Redesign of IH 35E/Raceway interchange to include on-/off-ramps to/from the north and improved Harry Hines Boulevard/Webb Chapel Extension connectivity (TxDOT)
- Consideration of NW Highway redesign from 6 to 4 lanes with pedestrian cap and conversion from State ownership (City/TxDOT)
- Update Mobility 2045 (NCTCOG)

# Next Steps

## 3. Love Field Access

- Refine alternative entry analysis and design (City)
- Create phasing plan for airport and roadway improvement integration (City/TxDOT)
- Continue public engagement for second entrance (City)
- Develop cost estimate, design, phasing to advance Shorecrest Drive to four lanes (City)
- Feasibility study for northeast airport corner interchange redesign (City/TxDOT)

## 4. Study Area – Complete

# Next Steps

## 5. Public Involvement

- Continue as needed for implementation (Various)

## 6. Economic development

- Commission a more detailed economic development plan/study for these areas including anti-displacement strategies (City)

## 7. Bicycle/Pedestrian Trails

- Advance sidewalk and bike recommendations to design/ fund improvements for city streets (City)
- Bike facility feasibility studies – Denton Drive and Walnut Hill Lane (City)
- Develop cost estimate and advance design for signal upgrades and intersection improvements (City)

# Next Steps

## 8. Northwest Highway Redesign/ Pedestrian Cap

- Initiate design of intersection and sidewalk improvements west of Lemmon Ave (TxDOT)
- Lane reduction for safety and pedestrian friendly design from Webb Chapel Ext. to Lemmon Ave (TxDOT)
- Coordination on enhanced crossing/land bridge at undeveloped object free airport property on Northwest Highway (City/TxDOT/NCTCOG)
- Feasibility study for increasing bike/pedestrian access on Webb Chapel Road bridge (City)

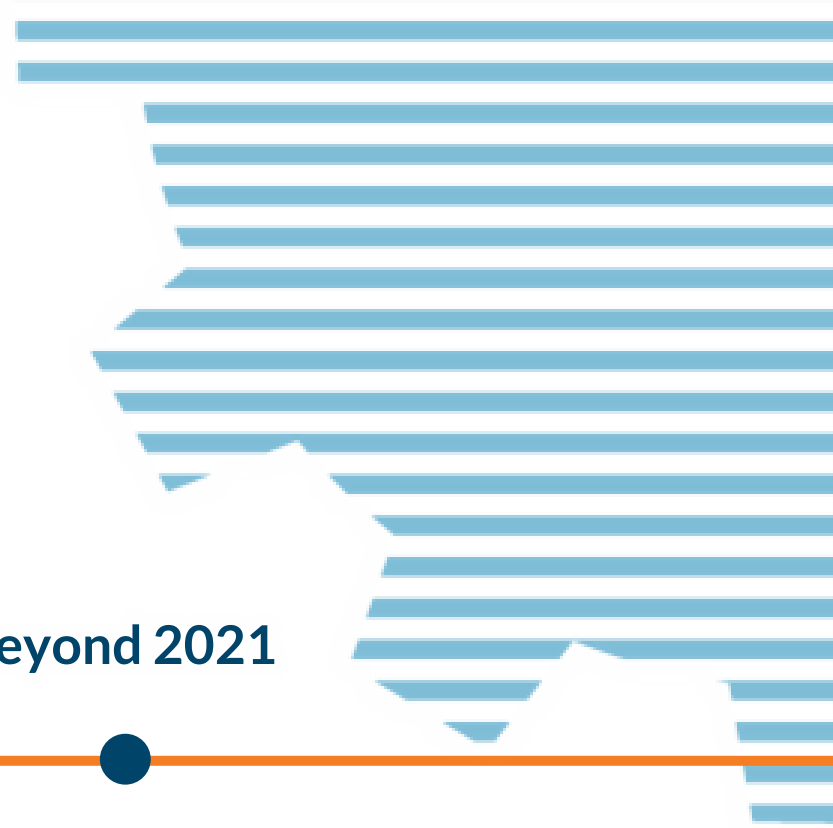
## 9. Harry Hines Boulevard

- Complete the corridor study and coordinate on intersection design as needed (NCTCOG)
- Coordinate on bike/pedestrian crossings as needed (City)

## 10. Transit

- Continue coordination on transit access options to Love Field that present the least conflict for other modes (City/DART)

# Next Steps Timeline



## November 2021



11/4/21 virtual public meeting  
Comments due 12/03/21

## December 2021



Final documents online and provided to City of Dallas

## Beyond 2021



Coordination as needed with City of Dallas, Dallas County, DART, and TxDOT to advance recommendations

# Discussion

Comments or questions on information presented today?

Comment form link:

<https://forms.office.com/r/PqjwW6Yrsb>

Comments are due **12/03/2021** to be noted with recommendations online

Access after meeting at:

[www.NCTCOG.org/BachmanArea](http://www.NCTCOG.org/BachmanArea)



Image Provided By Gibran Lule-Hurtado

# Contact Us



[www.nctcog.org/BachmanArea](http://www.nctcog.org/BachmanArea)



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