

# Lavon Lake Route Study

FM 1378 to SH 78

## Public Hearing

Collin County Commissioners' Court

October 11, 2010



Lavon Lake Route Study

# Public Hearing Agenda

- Project Overview
- Project Need and Purpose
- Route Study Process
- Development and Analysis of DRAFT Technically Feasible Alignment
- Public Comments
- Commissioners' Court Action



# Project Overview

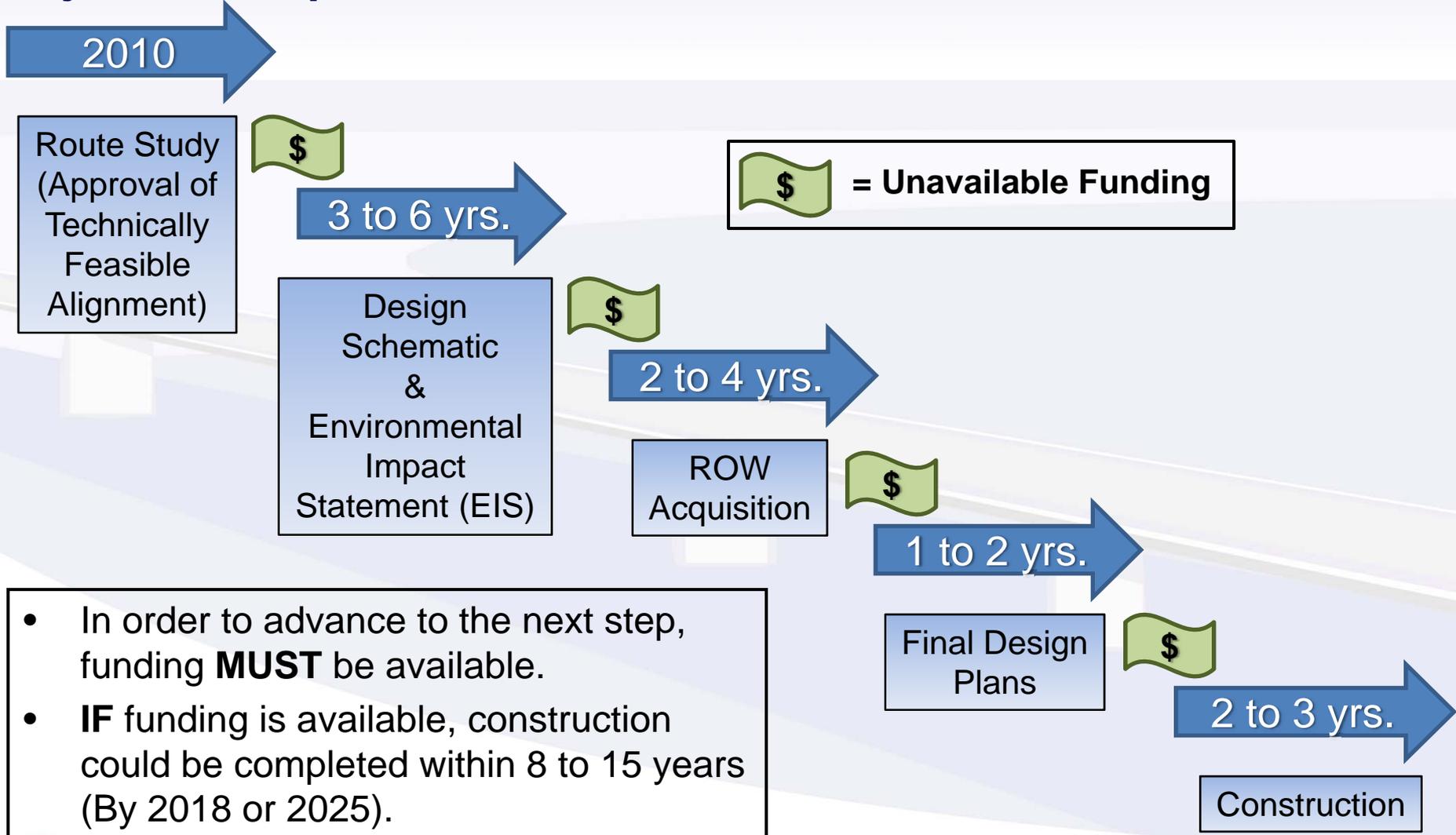
## Route Study

- In 2007, the project was initiated as a result of the Bond Election where voters approved funding for a route study across Lavon Lake.
- In April 2009, the Commissioners' Court elected to begin developing the route study to ultimately approve a Technically Feasible Alignment across Lavon Lake.
  - Satisfies the Need and Purpose of the project
  - Avoids and/or minimizes impacts
  - Provides an optimal solution for the project



# Project Overview

## Project Development



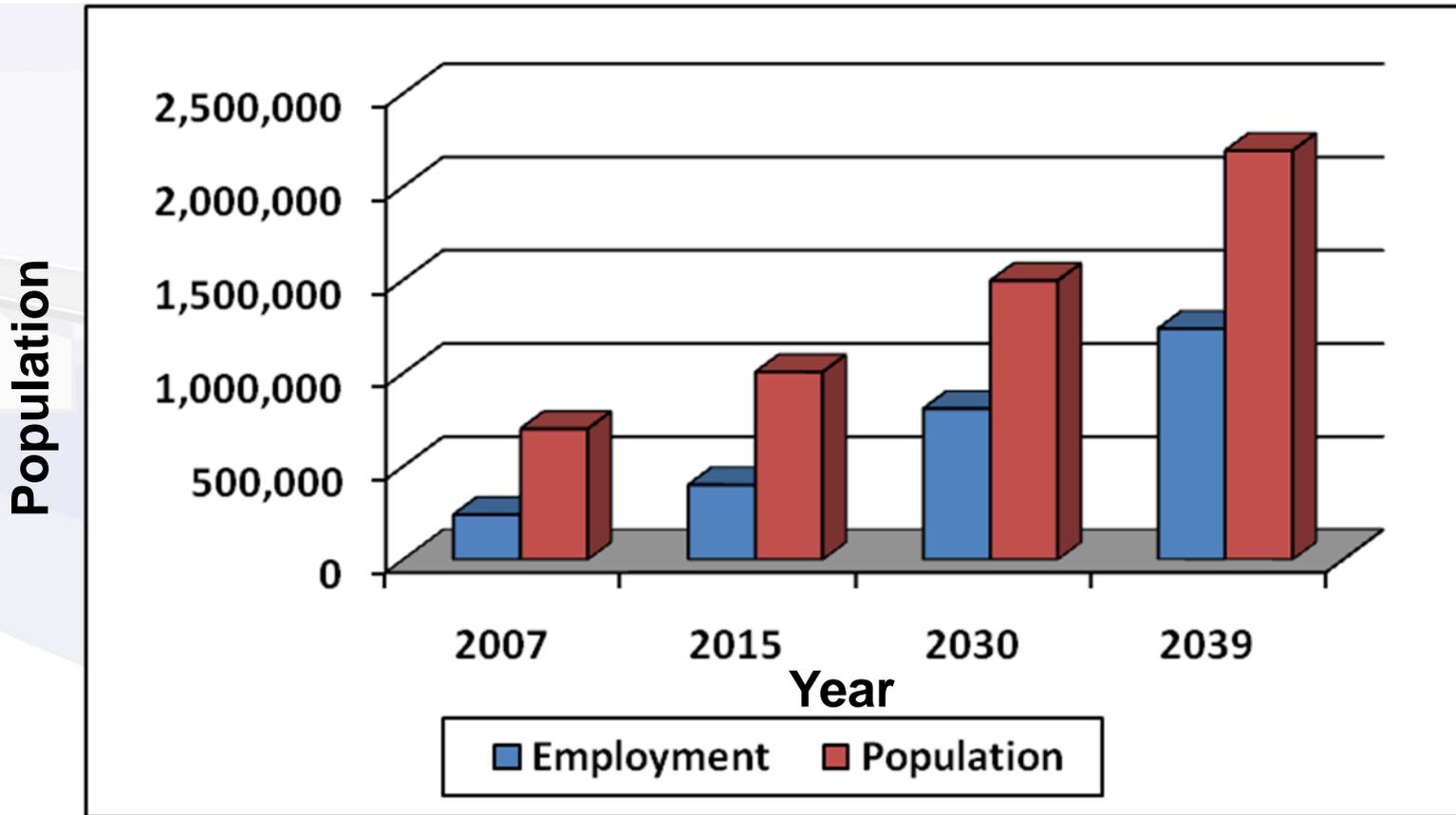
- In order to advance to the next step, funding **MUST** be available.
- **IF** funding is available, construction could be completed within 8 to 15 years (By 2018 or 2025).



# Project Need and Purpose

## Collin County Employment and Population Growth

From Collin County Mobility Plan 2007 Update



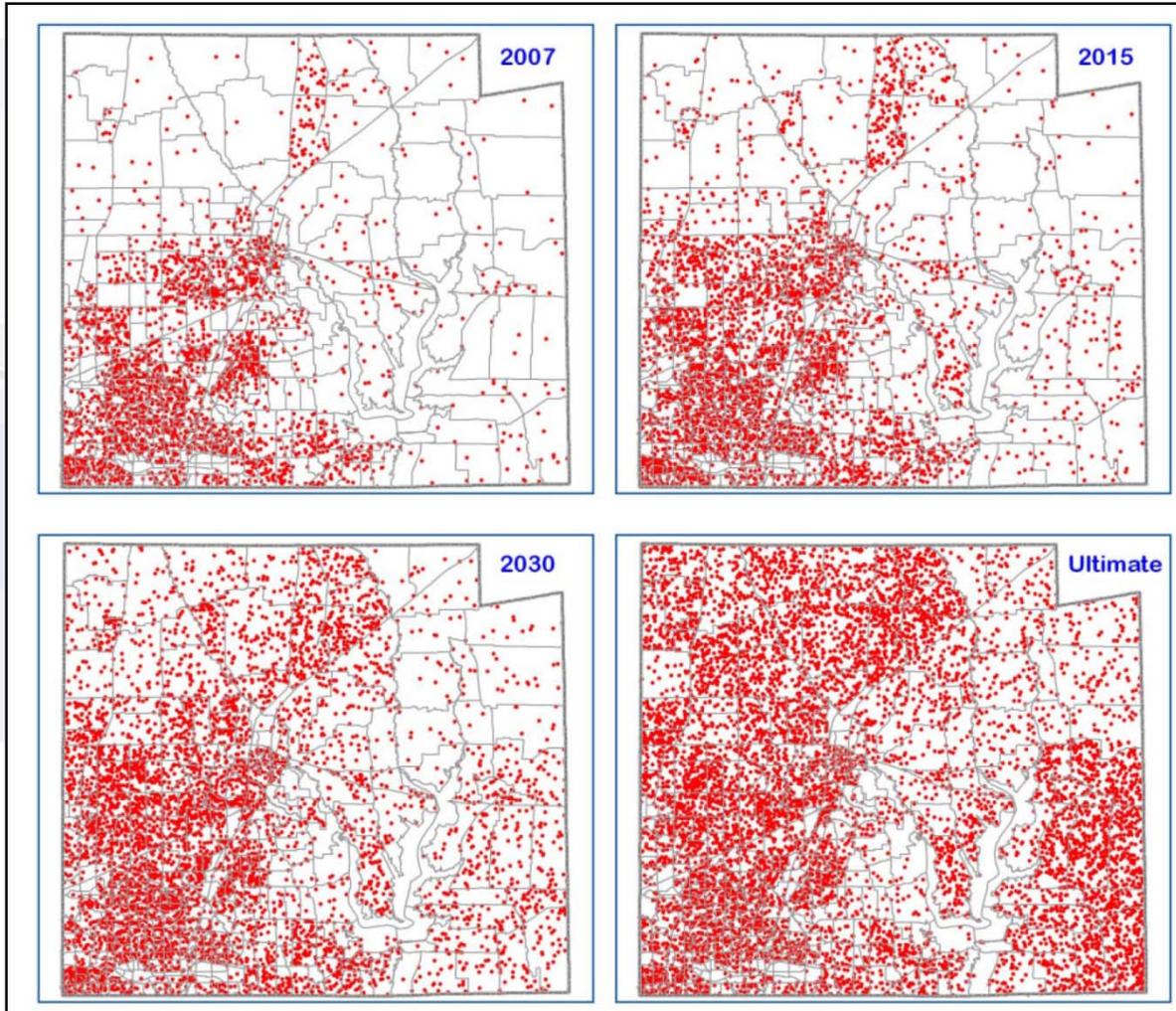
- 2030 Design Year
- 2039 Ultimate



# Project Need and Purpose

## Collin County Population Growth

From Collin County Mobility Plan 2007 Update



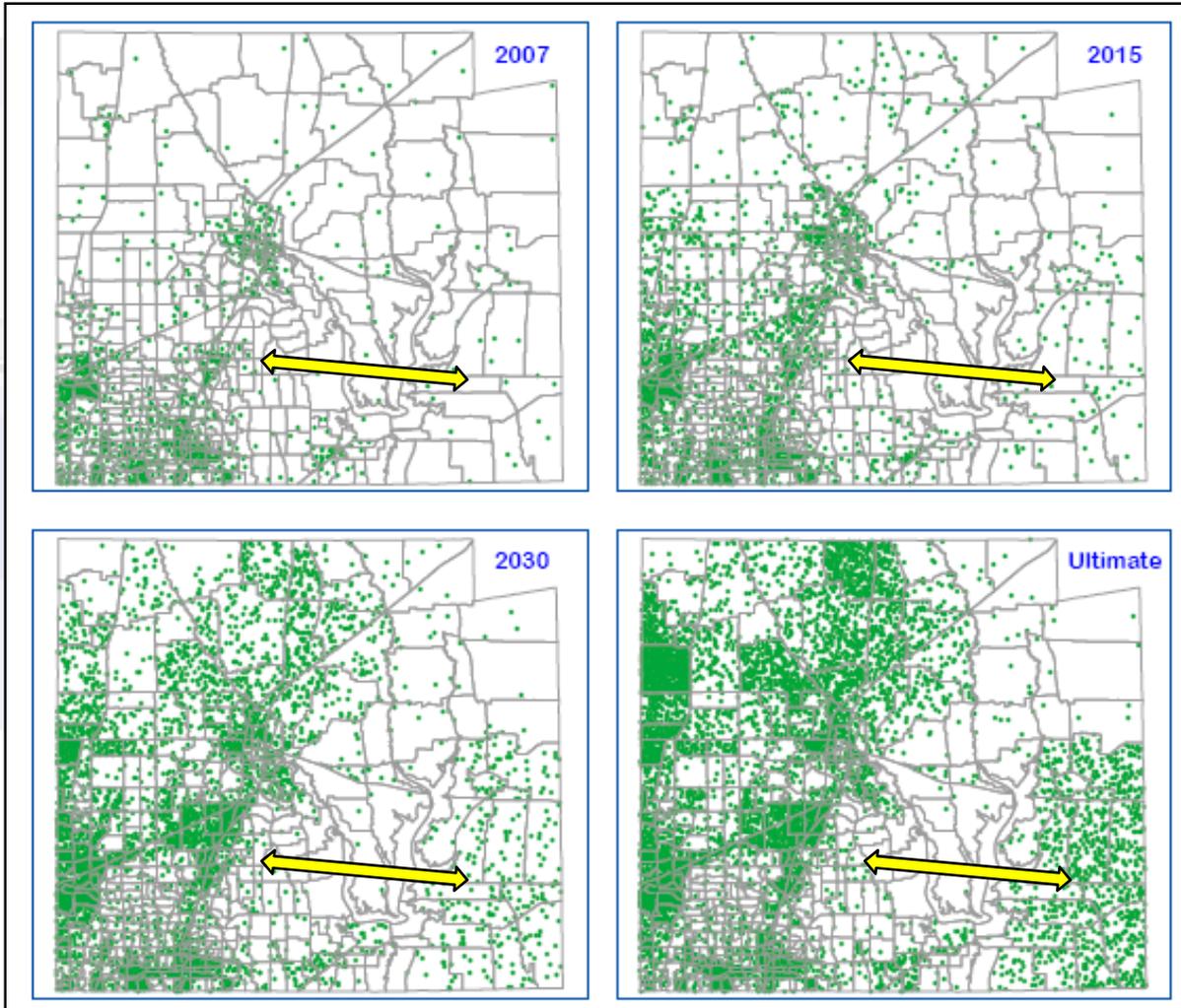
- **Ultimate = 2039**
- **1 Dot = 250 Residents**



# Project Need and Purpose

## Collin County Employment Forecast

From Collin County Mobility Plan 2007 Update



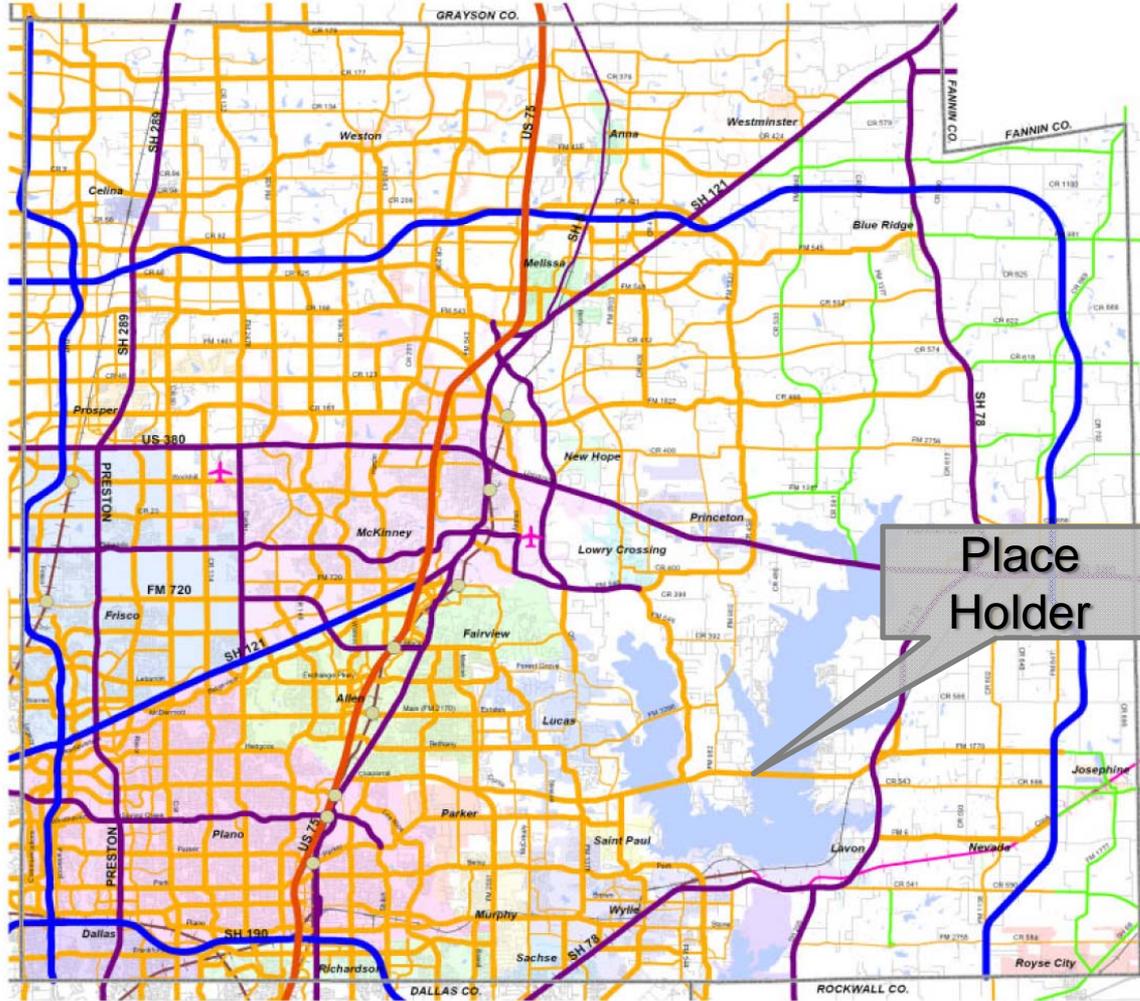
- Ultimate = 2039
  - 1 Dot = 150 Employees
- ↔ = Traffic Patterns



# Project Need and Purpose

## Collin County Thoroughfare Plan

From Collin County Mobility Plan 2007 Update



Place Holder

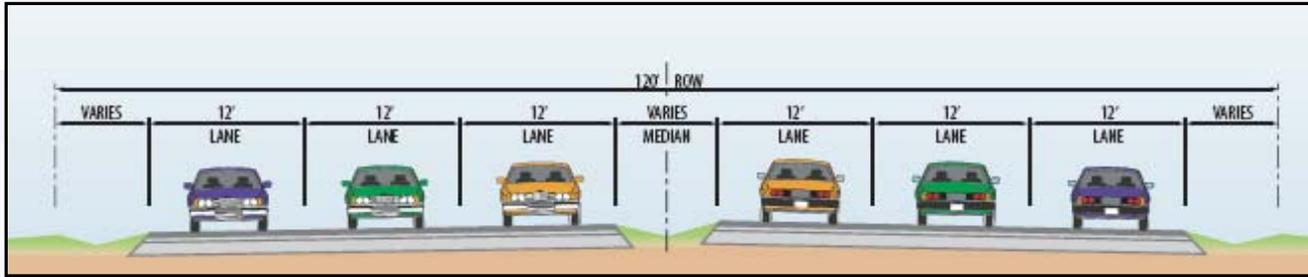


# Lavon Lake Route Study

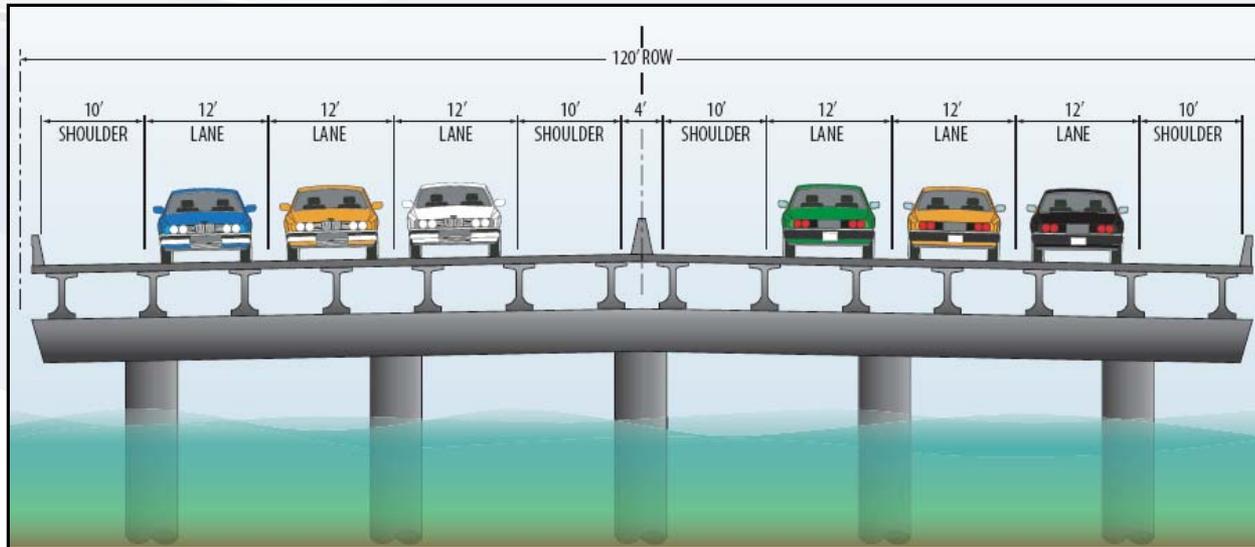
Source: [www.co.collin.tx.us](http://www.co.collin.tx.us)

# Project Need and Purpose

## Proposed Typical Section – Major Arterial



**Roadway Typical Section (120' ROW)**



**Bridge Typical Section (120' ROW)**



# Project Need and Purpose

- Identify a technically feasible alignment to accommodate the growing east-west mobility needs resulting from population growth and development.
- Provides direct access to/from US 75, the peninsula, and the future Outer Loop for greater mobility and emergency access.
- Provide an alternate east-west route other than US 380 and SH 78 in southeastern Collin County to alleviate congestion.



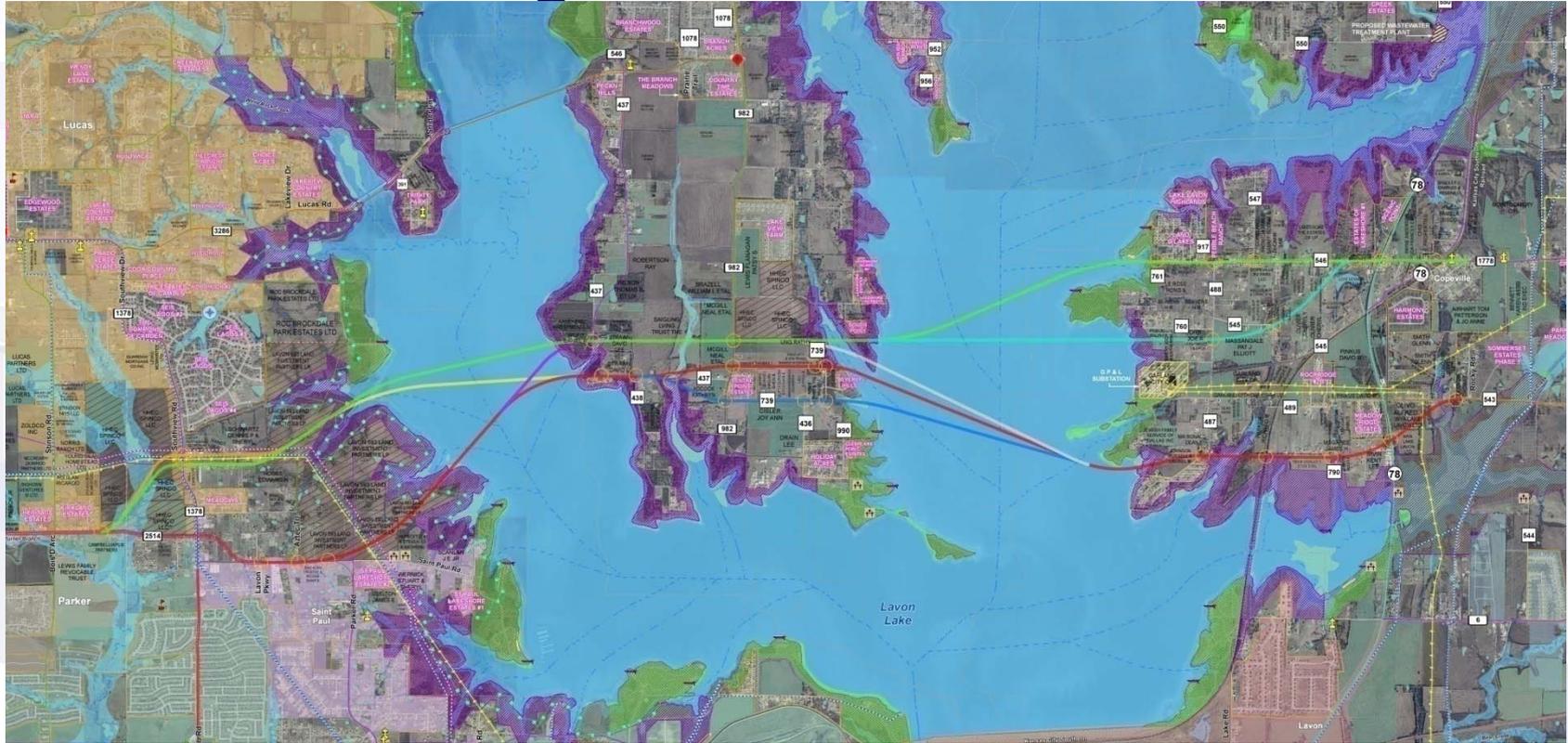
# Route Study Process

- **Data Assembly and Review**
  - Develop Environmental Constraints Map
  - Coordination with Cities and Agencies
- **Develop Alternative Alignments**
- **Public Meeting 1 – October 7, 2009**
  - Initial alternative alignments
- **Refined/Evaluated Alternative Alignments**
- **Public Meeting 2 – May 19, 2010**
  - Alternative alignment evaluation and DRAFT Technically Feasible Alignment
- **Public Hearing – October 11, 2010**
  - Request approval of the Technically Feasible Alignment
- **Develop Final Report**



# Alternative Alignment Development

## Initial Alternative Alignments



- **Avoid and/or minimize impacts to environmental features.**
- **Meets geometric design criteria.**
- **Minimizes impacts to the number of parcels and homes affected.**
- **Leverage existing and/or future roadway networks.**



# Alternative Alignment Development

## Updated Alternative Alignments



- Based upon public input at Public Meeting #1, the purple alignment was developed and evaluated.



# Alternatives Evaluation Matrix

Category	Criteria	Build Alternatives			Criteria Notes
		North (Purple Alignment)	Middle (Green Alignment)	South (Red Alignment)	
Enhanced Mobility and Safety	Accessibility	++	++	++	Provides direct access to/from US 75, the peninsula, and the future Outer Loop.
	Safety	++	++	++	Meets design criteria. Takes skew angles and the number of intersections into account.
Cost Effectiveness	Construction Cost	--	--	-	Total project roadway/bridge length to develop order of magnitude "planning level" cost estimates.
	ROW Acquisition	--	--	-	Number of parcels and owners impacted to develop order of magnitude "planning level" cost estimates.
	Utilities and Infrastructure	-	-	-	Impacts to major utilities and infrastructure.
Engineering Feasibility	Compatibility with Other Projects	+	+	++	Compliments City/County Thoroughfare Plans along with ongoing projects for desirable connectivity.
Public Input	Public Input	+	-	-	Comments from the Public Meeting.
Environmental Features	Socio-Economic and Neighborhood	--	--	--	Impacts to neighborhoods along with potential impacts to parks and/or Corps of Engineers Recreation Areas.
	Noise Impacts	--	--	--	Impacts to adjacent residences, schools, hospitals, parks and other sensitive noise receptors within 500' of ROW.
	Natural Impacts	--	-	-	Impacts to streams, floodplains, and agricultural/grazing areas.
	Cultural Impacts	--	-	-	Impacts to known cemeteries, potential historic sites, and archeological sites.
	Hazardous Materials	0	0	0	No impacts to known Hazmat sites.

**Denotes:** Difference in Ratings amongst Build Alternatives

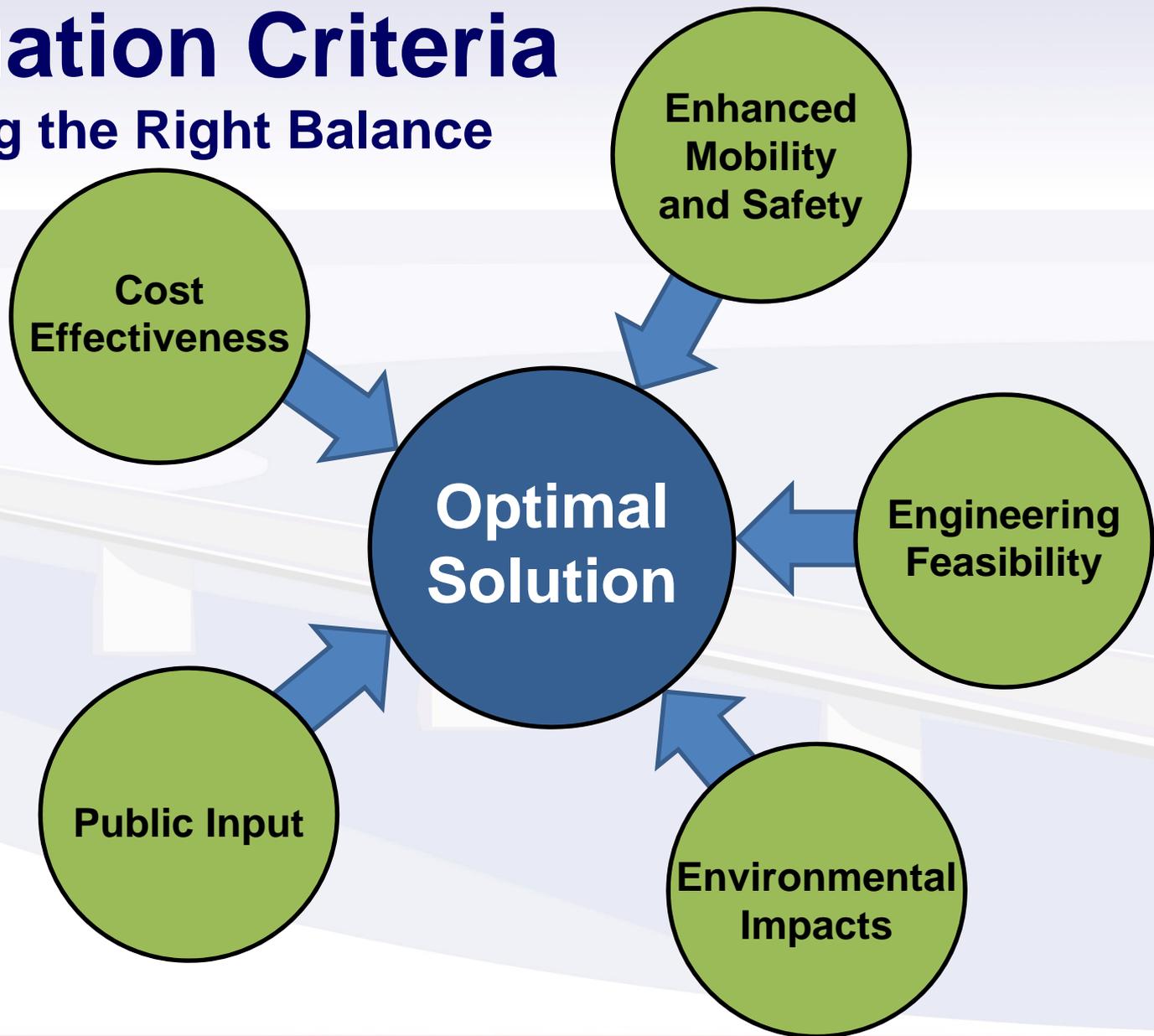
### Key to Ratings:

Significant Negative Effect	Some Negative Effect	No Effect, Neutral	Some Positive Effect	Significant Positive Effect
--	-	0	+	++



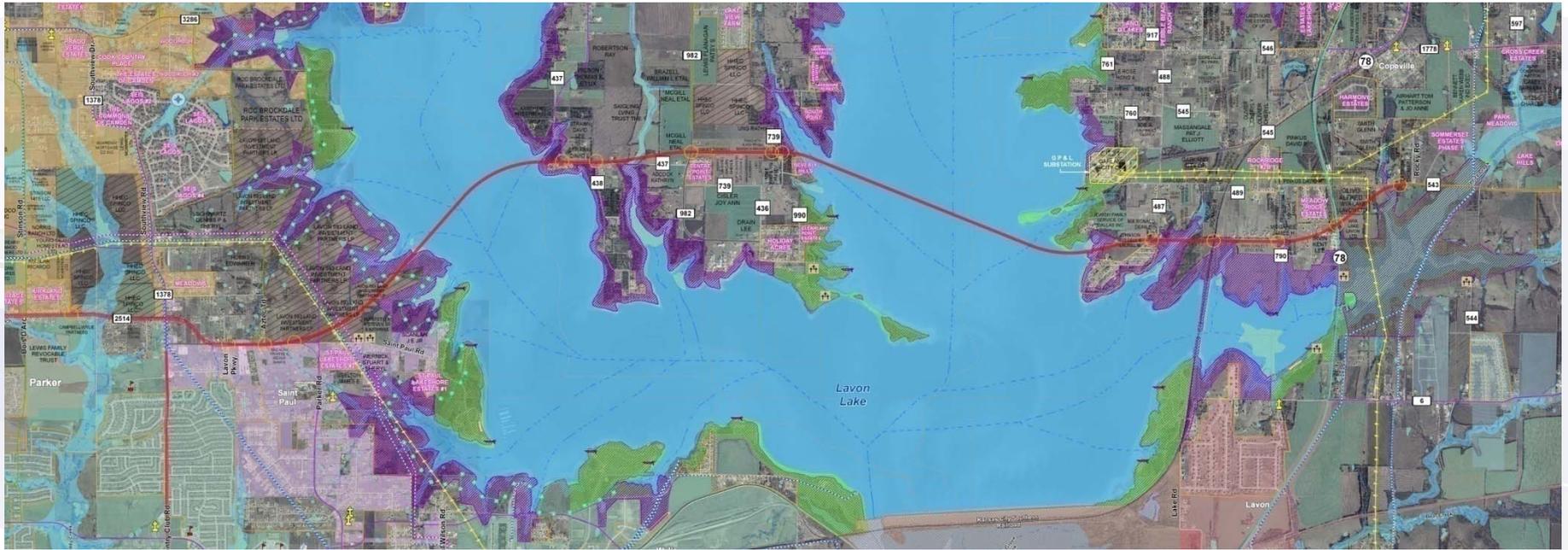
# Evaluation Criteria

Achieving the Right Balance



# Alternative Alignment Development

## DRAFT Technically Feasible Alignment



- Proposed “Optimal Solution”.
- Geometric refinements may occur through subsequent project development (design schematic, ROW acquisition, and final design)
- Contingent upon Commissioners’ Court approval.



# Public Comments

- Please limit your Comments to 3 minutes

