PHASE I - LUBBOCK OUTER ROUTE STUDY

Texas Department of Transportation

PUBLIC MEETING

September 01, 2009

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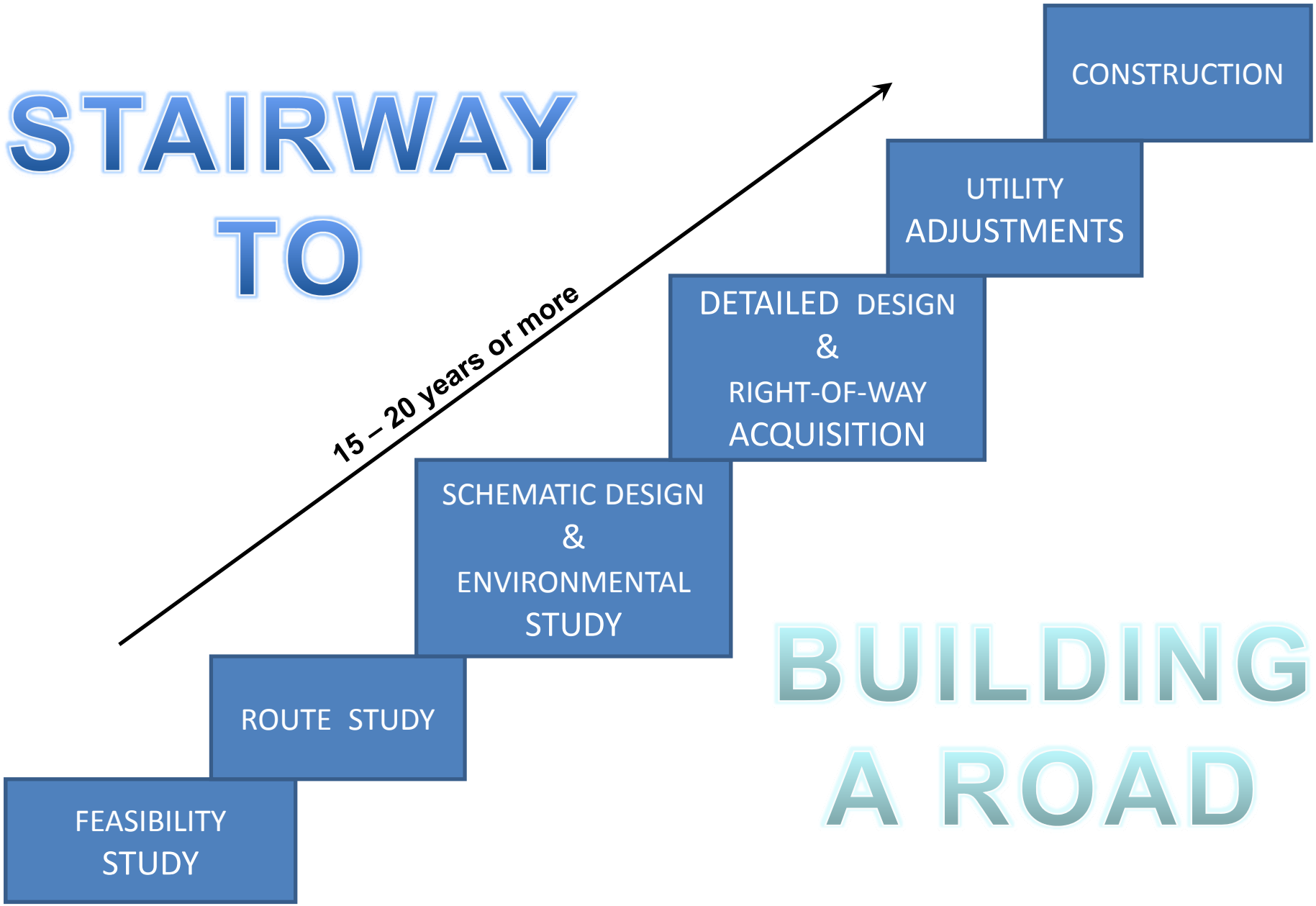

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Phase I - Lubbock Outer Route Study

Purpose of the Study

- Determine a preferred alternative for an Outer Route around the western and southern area of the City of Lubbock from US 84 northwest of Lubbock to US 84 southeast of Lubbock
- Investigate, through a "fatal flaw" analysis, improvements and continued development of a preferred route
- Support Local Transportation Goals:
  - "Create an integrated multi-modal transportation network to better serve the citizens in the Lubbock Metropolitan Area." (Lubbock MPO 2032 Plan)
- Ensure consistency with TXDOT statewide goals:
  - Reduce congestion
  - Enhance safety
  - Expand economic opportunity
  - Improve air quality
  - Increase the value of transportation assets

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The successful results of this project will provide:

- ✓ A National Environmental Protection Act (NEPA) Compliant Process
- ✓ A defensible Need and Purpose Statement
- ✓ A viable alternative which has logical termini and independent utility
- ✓ Informed consent from stakeholders
- ✓ Better defined corridor location and facility type
- ✓ ROW corridor for preservation
- ✓ A defensible phasing concept / implementation plan for the project
- ✓ A workable funding scheme

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Project Schedule

Begin Feasibility Study	May 2009
Outline of Feasibility Study	July 2009
First Public Meeting	Sept 2009
Second Public Meeting	Dec 2009
Draft Feasibility Study	March 2010
Third Public Meeting	May 2010
Final Feasibility Study	May 2010
Complete Feasibility Study	May 2010

Begin Route Study	June 2010

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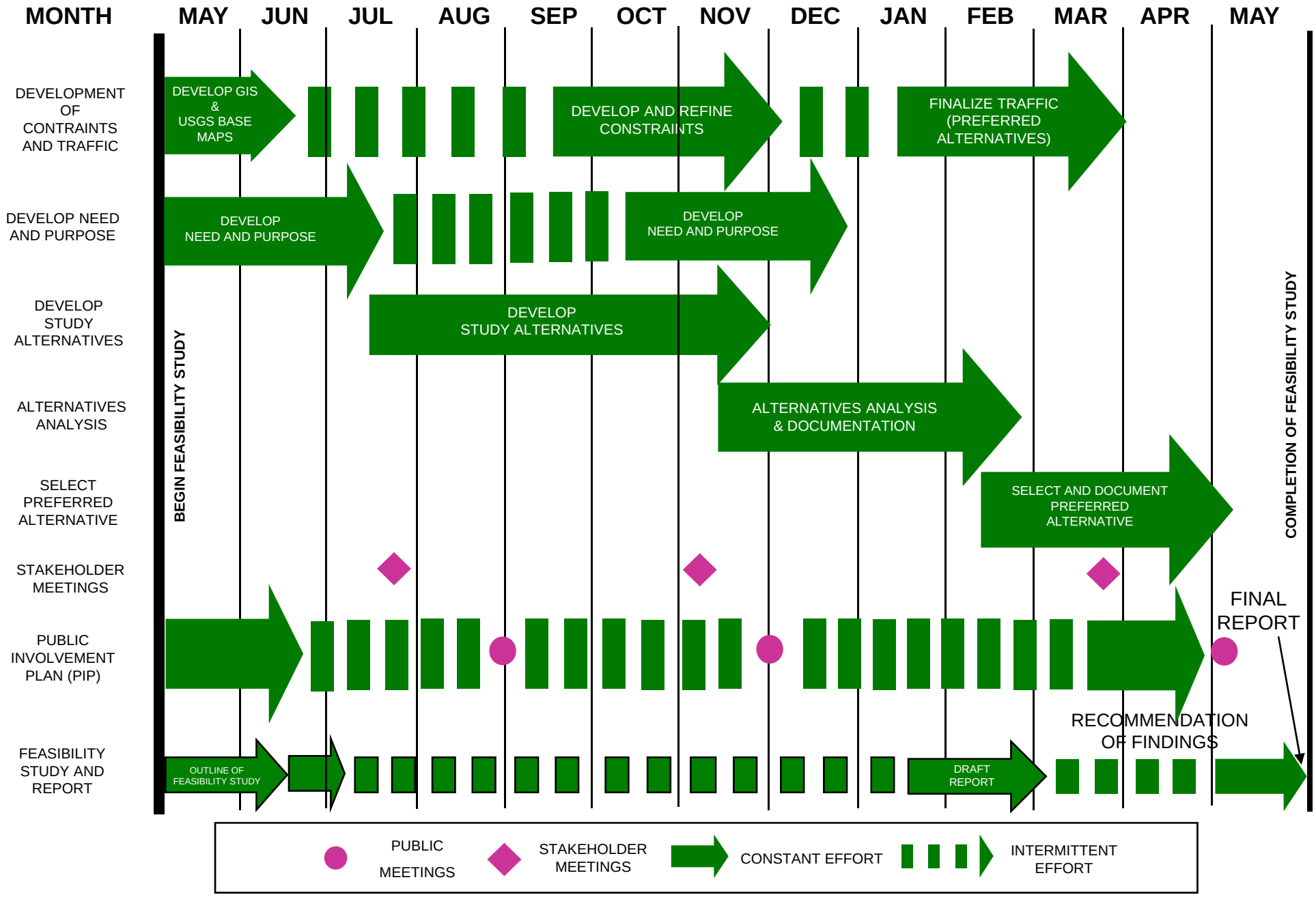
FEASIBILITY STUDY SCHEDULE



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Phase I Lubbock Outer Route

Feasibility Study

- Need and Purpose
- Social, Economic, Environmental Studies and Public Involvement
- Evaluation of Existing Systems
- Establish Technical Methodology
- Alternative Analysis
- Refine Alternatives
- Funding

Route Study

- Route and Design Studies
- Continued Environmental Investigation
- Continued Public Involvement
- Route Location Study Report

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Feasibility Study

- Determine preferred alternative for an Outer Loop Route around western and southern sides of the City of Lubbock from US 84 northwest of Lubbock to US 84 southeast of Lubbock
- Investigate, through a fatal flaw analysis, improvements and continued development of a preferred route

Steps Include:

1. Following the NEPA process, including public involvement process
2. Holding three (3) stakeholder meetings and three (3) public meetings
3. Recommending findings, which will then be used in the Route Study, which follows the Feasibility Study

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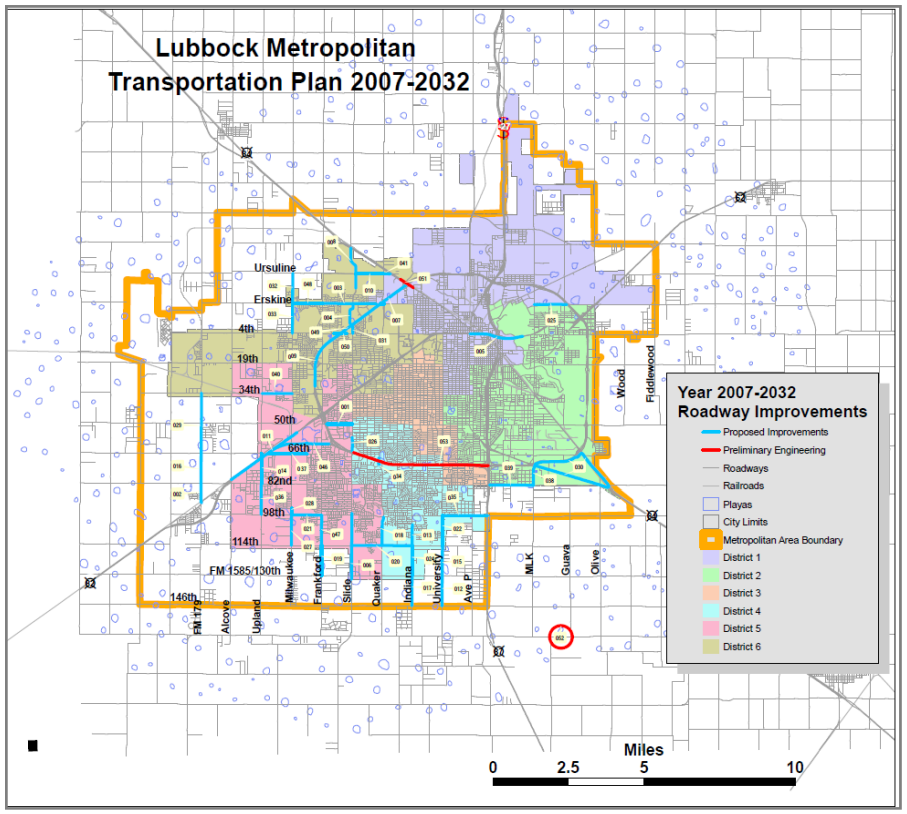
Need and Purpose

- Investigation of need and purpose
- Creation of uncontrolled aerial mosaic
- Research previous studies
  - Lubbock 2032 MTP
  - Cities land use plans
  - Ports to Plains
  - ITS Plans



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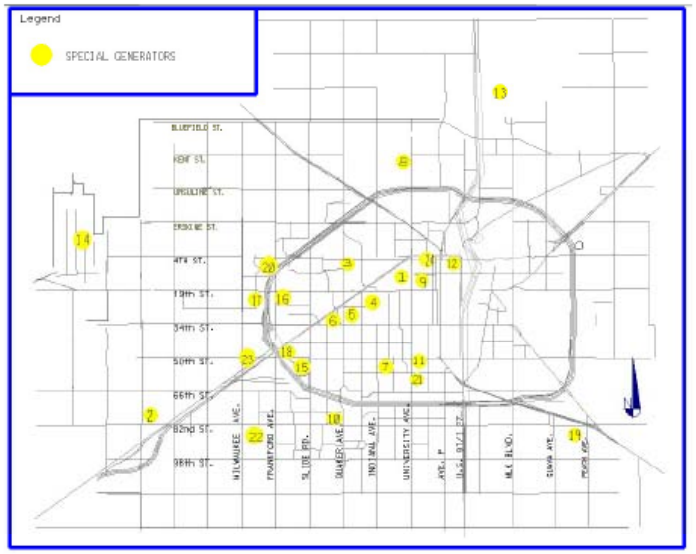
Need and Purpose (continued)

- Development of GIS map
  - Land Use
  - Political boundaries
  - Cultural resources
  - Utilities
  - Constraints data:
    - Location of schools, churches, cemeteries, large employers, parks, historical architecture, culturally significant sites, water features/wetlands, wildlife habitat, hazardous waste sites, geological formations, FEMA mapping, playa lakes, census areas, major roads, railroads, center pivots.



1 Texas Tech University
2 Frenship High
3 University Medical Center/HSC
4 Covenant Hospital
5 Covenant Lakeside Hospital
6 Coronado High
7 Monterey High
8 State School/SBC
9 Lubbock High
10 Wall-Mart/S. Loop
11 Highland Hospital
12 Downtown:
Lubbock A-J Plant
Federal Building
County Courthouse
City of Lubbock
LISD Administration
Civic Center
13 Airport
14 Reese Center
15 South Plains Mall
16 Lubbock Christian University
17 Wayland Plaza
18 NTS
19 Montford Correctional Unit
20 Walmart/4th Street
21 Kmart Supercenter
22 Walmart/82nd St. and Frankford
23 Canyon West
24 Walmart/4th and Ave. Q

Source: Lubbock Metropolitan Planning Organization

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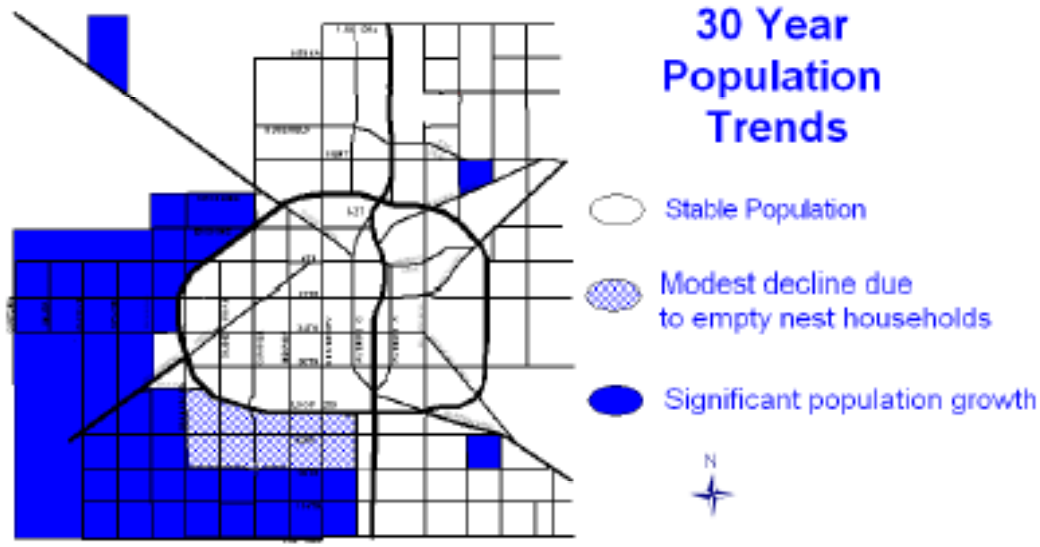
Need and Purpose (continued)

- Data Collection
  - Population growth
  - Employment characterization

Figure 3-2: 30-Year Population Trends



- Draft Need and Purpose Report
  - Record updated field inventories and reviews
  - Summaries of data developed
  - Catalog all information collected

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Social, Economic, Environmental Studies and Public Involvement

- Public Involvement Plan
  - Public awareness and coordination of public meetings to identify alternatives and facilitate the NEPA process
  - SAFETEA-LU mandates the involvement of agencies and the public in development of need and purpose and study alternates.

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Social, Economic, Environmental Studies and Public Involvement *(continued)*

- Three Stakeholder Meetings
  - Benchmark Assessments:
    - Development of need and purpose
    - Development of study alternatives
    - Refinement of study alternative
    - Preferred alternative
    - Results of Feasibility Study
  - Stakeholders to include:
    - Lubbock
    - Wolfforth
    - Slaton
    - Shallowater
    - Lubbock County
    - Lubbock Metropolitan Planning Organization

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Social, Economic, Environmental Studies and Public Involvement *(continued)*

- Public meetings
  - Plan, coordinate, participate and execute three public meetings
  - Identify the location of and the logistics of the meeting
    - Western Segment
    - Eastern Segment
    - Central Segment

  - Produce documentation from meetings
  - Bound report
  - Follow 43 Texas Administrative Code (TAC) 2.40-2.50, Code of Federal Regulations Title 23, Part 771, and the Environmental Manual

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Social, Economic, Environmental Studies and Public Involvement *(continued)*

- Comprehensive Mailing List
- Informational Tools
  - Flyers
  - Quarterly Newsletters
  - Handouts
  - Project Business Cards
  - TxDOT Website
  - Media relations
  - Bilingual materials, as necessary

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Social, Economic, Environmental Studies and Public Involvement *(continued)*

Environmental Considerations:

- Elements of the existing human and natural environment will be identified
- Constraints will be mapped in GIS for the county and considered in all stages of alternatives analysis
- Environmental considerations will be documented and reported for use in future NEPA compliance studies (EA, EIS)

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Social, Economic, Environmental Studies and Public Involvement (continued)

Regulations and Policies will guide study. Potential permit issues identified:

- Endangered Species Act
- Clean Water Act (Section 401, 404)
- Section 106 of NHPA
- Farmland Protection Policy Act
- Section 4(f)/6(f)
- E.O. 12898 on Environmental Justice
- Indirect and Cumulative Impacts

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Social, Economic, Environmental Studies and Public Involvement *(continued)*

Selected Known Constraints:

- Floodplains, Playa lakes (usually not jurisdictional), Blackwater Draw and tributaries may be USACE jurisdictional
- Threatened and Endangered species:
  - Federal: incidental migrant birds
  - State: Texas horned lizard
- Several monitored species:
  - Plains spotted skunk
  - Black-tailed prairie dog
  - Western burrowing owl

- Past archeological studies within city; listed National Register of Historical Places (NRHP) historic structures in town; Lubbock Lake Landmark

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Social, Economic, Environmental Studies and Public Involvement *(continued)*

Selected Known Constraints (continued):

- Land use considerations:
  - residences
  - businesses
  - community facilities
  - agricultural lands (irrigation pivots)
  - hazardous materials
- BNSF/WTLR railroad crossings, oil and gas wells
- Socioeconomic considerations:
  - Census analysis to determine potential for disproportionate, adverse effects on minority or low-income communities
  - Consideration of equitable service provision to various parts of town
- Regional health of resources will be assessed for use in future indirect and cumulative effects analyses
- All other regulated resources will be investigated
- SAFETEA-LU serves as backdrop

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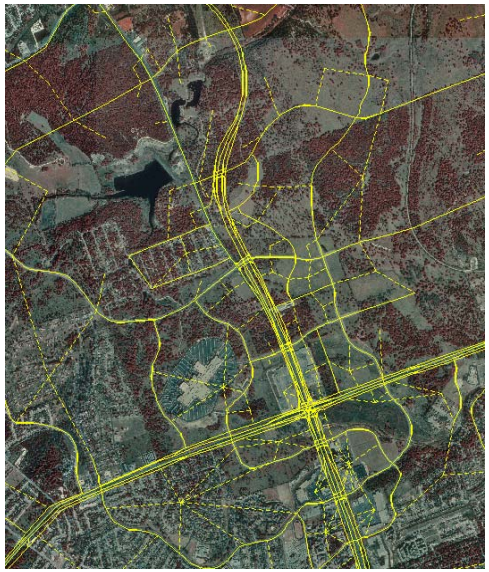
Evaluation of Existing Systems

- Confirm Study Area
- Prepare Data Collection Plan
- Existing Safety and Traffic Operational Analyses
  - Accident reports/analysis
  - Capacity level of service analysis
- Corridor Deficiencies
  - Identify areas of congestion
  - Identify high accident locations
- Study goals and objectives
  - Refinement of need and purpose statement
  - Create deficiency map



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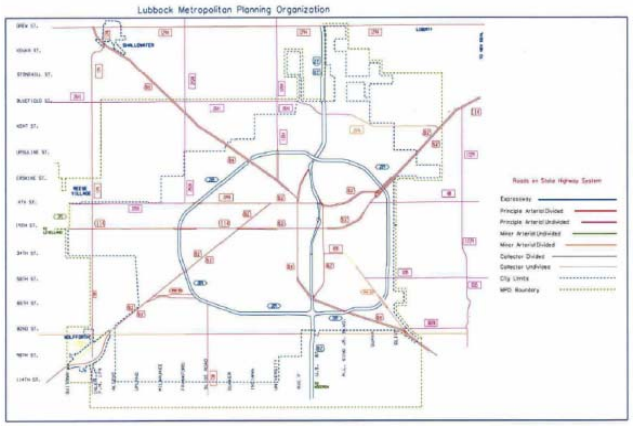
Technical Methodology



- Identify Viable Alternatives
- Uncontrolled Aerial Photography
- Data Collection
  - Digital aerial photos
  - Color infrared photography
  - County soil survey maps
  - Hazardous materials database information
  - Demographic maps / census information
  - Environmental Constraints
  - Development plans
- Approximate Right of Way Requirements.
- Development of an Evaluation Matrix

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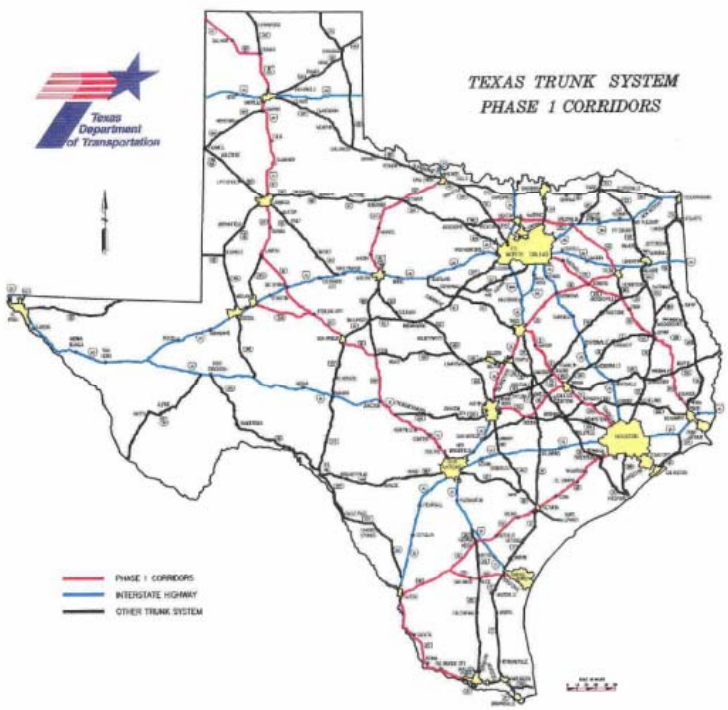
Alternative Analysis

(Minimum of Two Alternatives and a No-Build Alternative)

Traffic Analysis

- Analyze traffic data to assist in evaluating the viability and impacts of proposed alternatives.
  - Appropriate roadway geometry
    - Widening
    - New Alignment
      - Number of Lanes
      - Type of Facility
    - Phasing
    - Access
      - Interchanges
      - At-Grade
- Diagrammatic Configurations
  - Interchange Types
  - Regional Mobility
  - Local Access
  - Route Continuity
  - Lane Balance
  - Interchange Spacing
  - Right of Way Requirements
  - Estimated Construction Costs
  - Public Comments



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Alternative Analysis (continued)

(Minimum of Two Alternatives and a No-Build Alternative)

- Evaluation Matrix
  - Environmental Consideration
    - Right of Way Impacts / Potential Displacement
    - Natural / Cultural Resource Impacts
    - Public Comments
  - Roadway / Engineering Considerations
    - Design Objectives
    - Capital Cost
    - Major Utilities
  - Traffic and Mobility Studies
    - Regional Mobility
    - Travel Time
- Selection of a Recommended Alternative
  - Logical Termini
- Narrative Descriptions

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Refine Alternatives

- Refine alternatives based upon:
  - Public / stakeholder input
  - Design issues:
    - Geometric features
    - Traffic forecasts
    - Mobility assessment
  - Cost effectiveness:
    - Capital costs
    - Affordability and financing
    - Economic impact analysis
    - Funding results
  - Environmental issues:
    - Social and environmental evaluation
    - Constraints
  - Feasibility Recommendation

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Funding

- Traditional
  - Programmed dollars – project is not currently using any program dollars.
- Innovative
  - Direct users fees: Tolls
  - Indirect user fees: pass-through financing agreements
  - SIB Loans
  - TIFIA Loans
  - Advanced Construction Funding
  - GARVEE bonds
  - Value Capture
  - Tax Increment financing
  - Benefit Assessment Districts
- Other
  - Federal and State discretionary funds
  - Commission Discretionary Funds
  - Governors Business Development Fund
  - Congressional Earmarks
  - Public Private Partnerships and Joint Development Agreements

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Funding (continued)

Evaluation of Tolls

- Based on a combination of traffic and toll rates
  - Dependent on current and future land uses
  - Dependent on interaction with the current and future transportation system

Evaluation of Pass Through Financing

- Eligibility: TxDOT, Private, Local/County Government
- Identify Project
  - Project Description
  - Statement of benefits
  - Description of Local Support
- Analyze project
  - Estimate traffic
  - Evaluate project using conventional tolling
  - Estimate of minimum and maximum repayment periods
  - Determine impacts of conventional tolling

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Funding (continued)

Evaluation of State Infrastructure Bank

- Jurisdiction must qualify for federal aid under existing rules.
- Finance or financially enhanced transportation projects, which meet its selection criteria.
- SIB loans must be re-paid
  - Selection Criteria
    - Eligible transportation projects must be included in the associated planning document (e.g., Planning and Preliminary must be in the MTP)
  - Repayment
    - Increased taxes
      - Property
      - Sales
      - TIF
    - Program Dollars
    - Benefit Assessment Districts, etc.

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The successful results of this project will provide:

- *A NEPA Compliant Process*
- *A defensible Need and Purpose Statement*
- *Viable alternative which has logical termini and independent utility*
- *Informed consent from stakeholders*
- *Better defined corridor location and facility type*
- *ROW corridor for preservation*
- *A defensible phasing concept / implementation plan for the project*
- *A workable funding scheme*

✓**If proposed project is feasible, begin Route Study**

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