
ODOT
OKLAHOMA DEPARTMENT OF TRANSPORTATION
WELCOME
Public Meeting For SH-82
In Cherokee County
July 25, 2013
45
MPH

TEAM INTRODUCTIONS

- **ODOT**
  - **Darren Saliba - Division 1 Engineer**
  - **Chris Wallace - Division 1 Construction Engineer**
  - **Siv Sundaram - Environmental Programs**
  - **Laurie Effinger - Division 1 NEPA Project Manager**
  - **Jay Herbert & Anjie King - Right-of-Way Division**
  - **Frank Roesler III - Public Involvement Officer**

- **GARVER**

Jenny Sallee, PE
Project Manager
Roadway Lead

Kirsten McCullough AICP, RPA
Environmental Lead

Nick Braddy, PE
Roadway

Lacee Stanley, EI, CFM
Environmental
H&H

PURPOSE OF THIS MEETING

…is to Inform the Public and Solicit Comments About the Proposed Improvements to SH-82 North of Tahlequah (Approximately 8 Miles)

PROJECT PURPOSE

…is to Reduce Accidents and Improve Roadway Deficiencies as Well as Complete the Multi-Lane Loop Around Tahlequah to Ease Traffic Congestion

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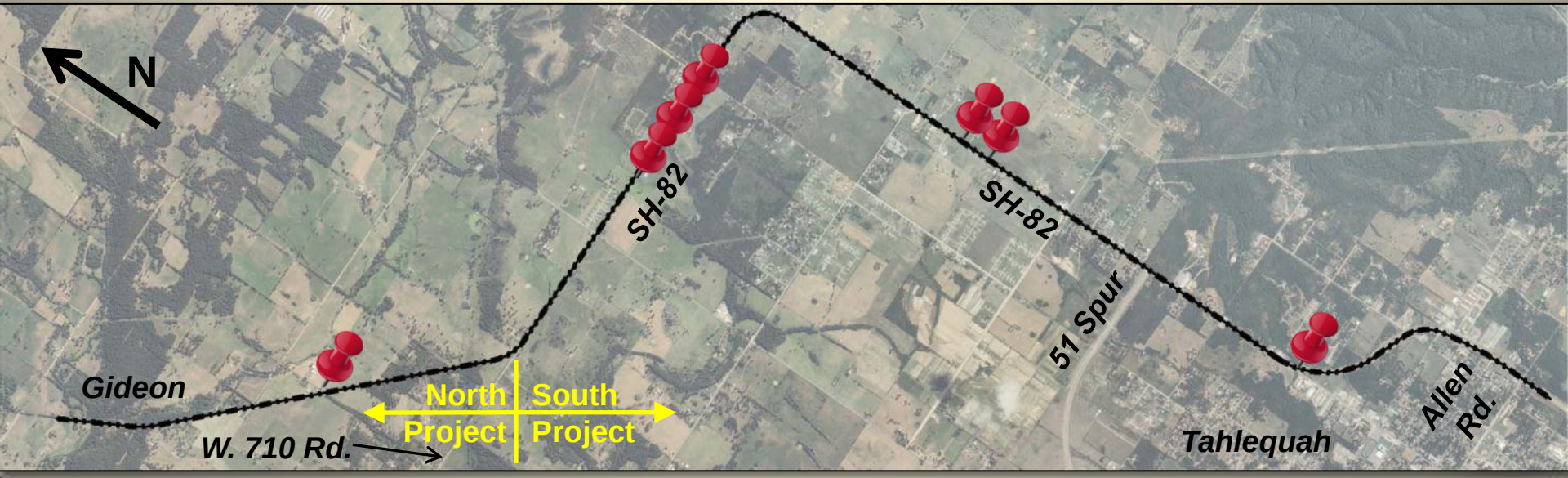
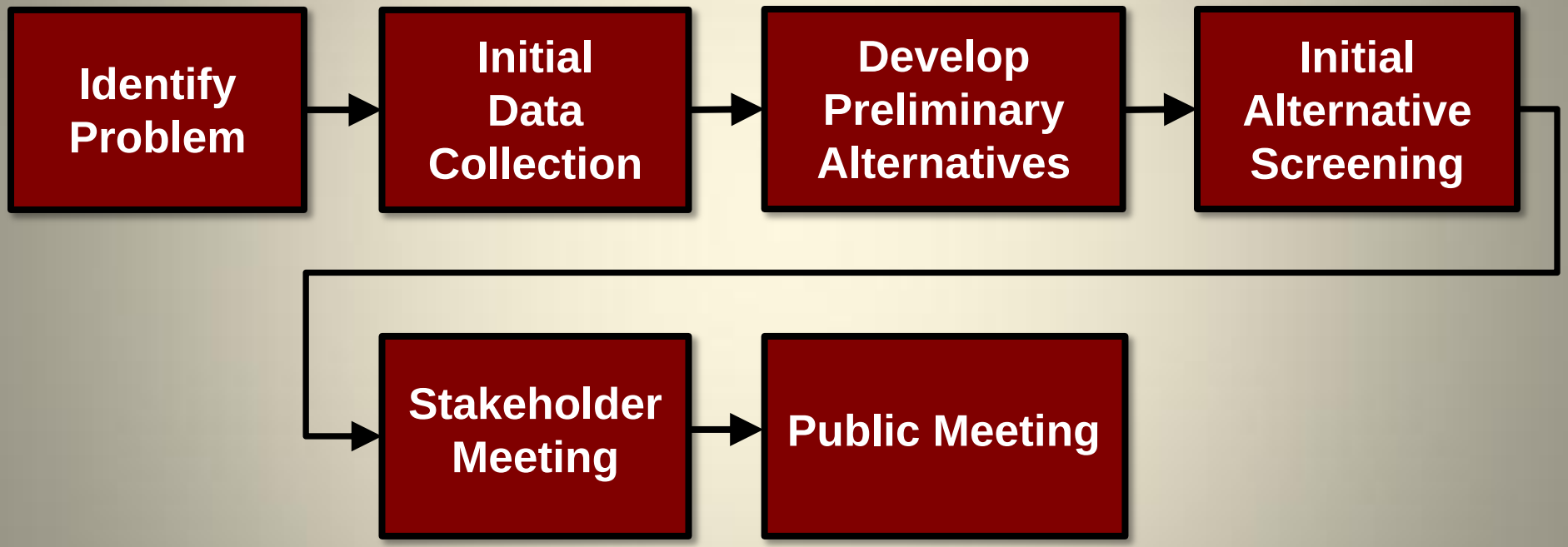
PROJECT AREA INFORMATION

- **General Data**
  - 2 Lane Existing Roadway (Rural Major Collector/Minor Arterial)
  - 7 Existing Bridge Structures (Bridge Class Culverts)
  - Current Traffic: 8,140 Vehicles/Day (10% Trucks)
  - Projected Traffic (2037): 11,600 Vehicles/Day
- **Corridor is Split Into Two Projects**
  - South Project – From Allen Rd. to W. 710 Rd.
  - North Project – From W. 710 Rd. to Gideon, OK
- **Project End – Future Bridge Replacement Project**



PROJECT DEVELOPMENT PROCESS



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EXISTING CONDITIONS WARRANT IMPROVEMENT

- **Roadway Deficiencies**
  - **Inadequate Sight Distance**
    - Rolling Terrain – Vertical Alignment
    - Sharp Curves – Horizontal Alignment
    - Blind Intersections
  - **No Shoulders**

Identify Problem → Initial Data Collection → Preliminary Alternatives → Alternative Screening

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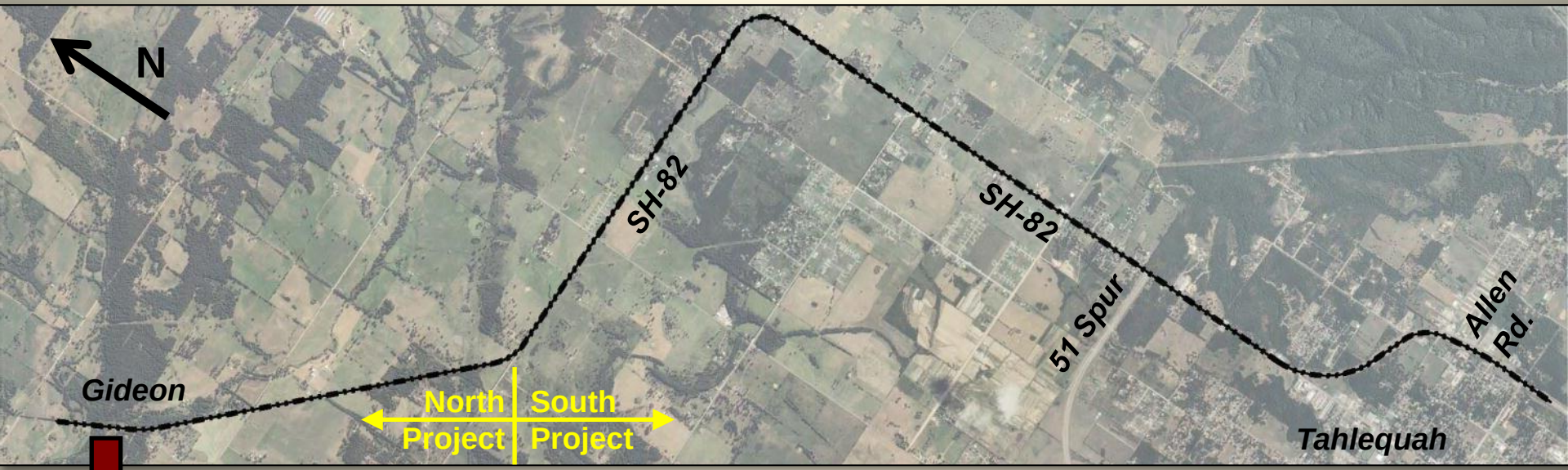
EXISTING DEFICIENCIES LEAD TO HIGH ACCIDENT RATE

- **Existing Accident Rate (South Project)**
  - **Total 109 Documented Accidents From Previous 5 Years**
    - 45 Personal Property Damage
    - 61 Injury (92 Persons)
    - 3 Fatal (6 Persons)
  - **More Than <u>TWICE</u> the State Average for Similar Facilities**
  - **Designated Safety Corridor by Oklahoma Highway Patrol**



Identify Problem | Initial Data Collection | Preliminary Alternatives | Alternative Screening

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DEVELOPMENT
OF
ALTERNATIVES

DEVELOPMENT OF ALTERNATIVES

- **Identified Key Existing Features**
  - **Topographical**
    - Challenging Terrain
      - Southeast Grade Changes
      - Rock Pit
    - Drainage Structures
    - Bridges
    - Businesses/Industries
      - Nursery
    - County Facilities
    - Residences
    - Utilities

Identify Problem → **Initial Data Collection** → Preliminary Alternatives → Alternative Screening

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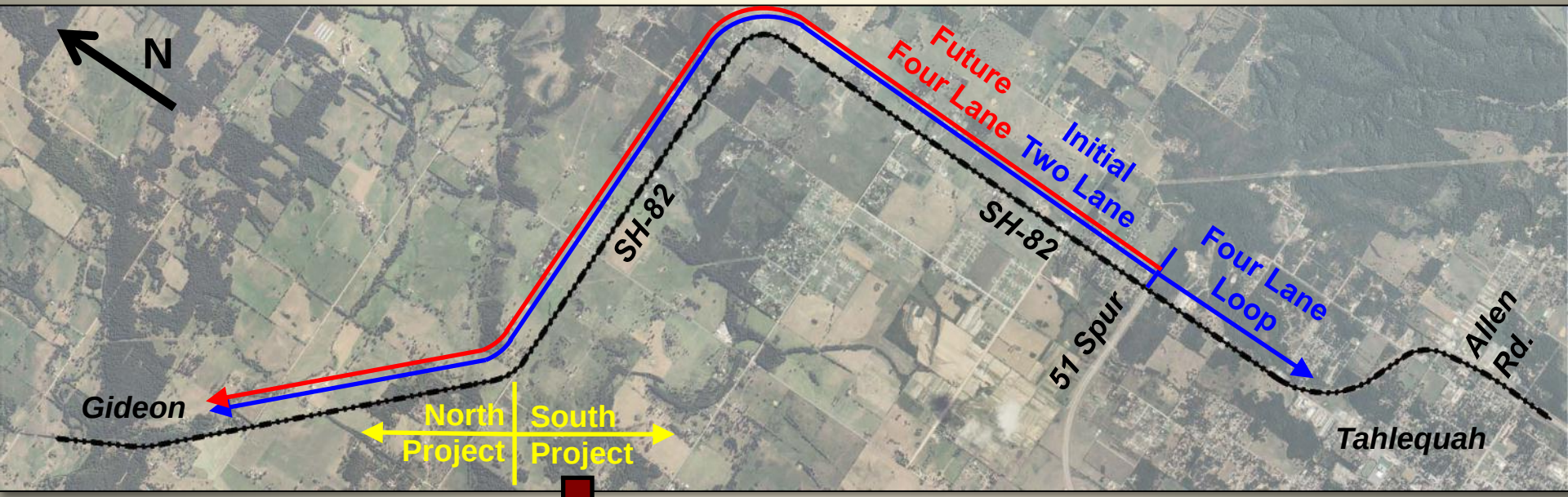
DEVELOPMENT OF ALTERNATIVES *cont'd...*

- **Lane Configuration**
  - **Four Lane Loop** - Limited Access
  - **Initial Two Lane** - Direct Access
  - **Future Four Lane** (Additional Two Lanes)
- **Impacts Based on Four Lane Configuration**
  - Total Construction Cost
  - Right-of-Way Impacts
  - Utility Impacts
  - Environmental Impacts



Identify Problem → Initial Data Collection → **Preliminary Alternatives** → Alternative Screening

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DEVELOPMENT OF ALTERNATIVES *cont'd...*

- **Proposed Design Criteria for All Alternatives**
  - **Design Speed of 65 mph**
    - Vertical Sight Distance
    - Horizontal Curves
  - **Roadway Typical Sections**

    <u>Future Four Lane Divided</u>
    - Two 12-Foot Lanes
    - 10-Foot Outside Shoulder
    - 4-Foot Inside Shoulder
    - 64-Foot Median

    <u>Initial Two Lane</u>
    - 12-Foot Lanes
    - 10-Foot Shoulders
  - **Intersections**
    - County Roads
    - Grand Ave.

Identify Problem → Initial Data Collection → **Preliminary Alternatives** → Alternative Screening

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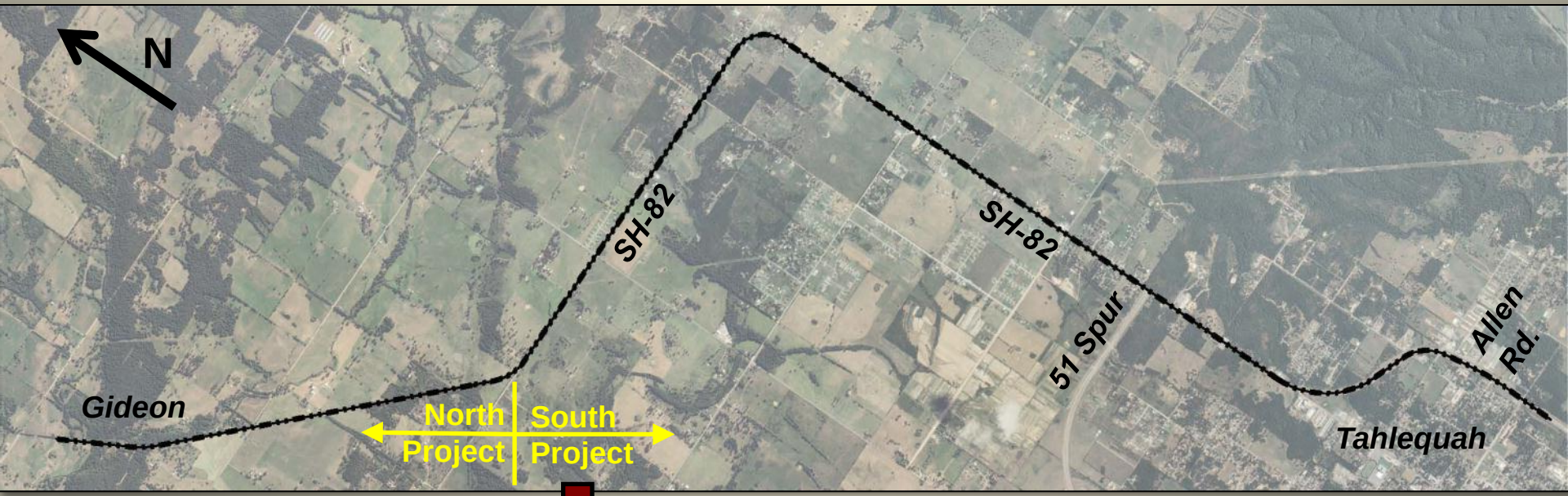
DEVELOPMENT OF ALTERNATIVES *cont'd...*

- **Started With Purpose in Mind**
  - "…To Reduce Accidents and Improve Roadway Deficiencies…"
- **Considered Improvement to Existing Roadway – Not Feasible**
  - Four Lane Divided Highway With Limited Access – Frontage Road Needed
  - Utility Impacts
  - Impacts to Residences and Businesses Along Highway



Identify Problem → Initial Data Collection → **Preliminary Alternatives** → Alternative Screening

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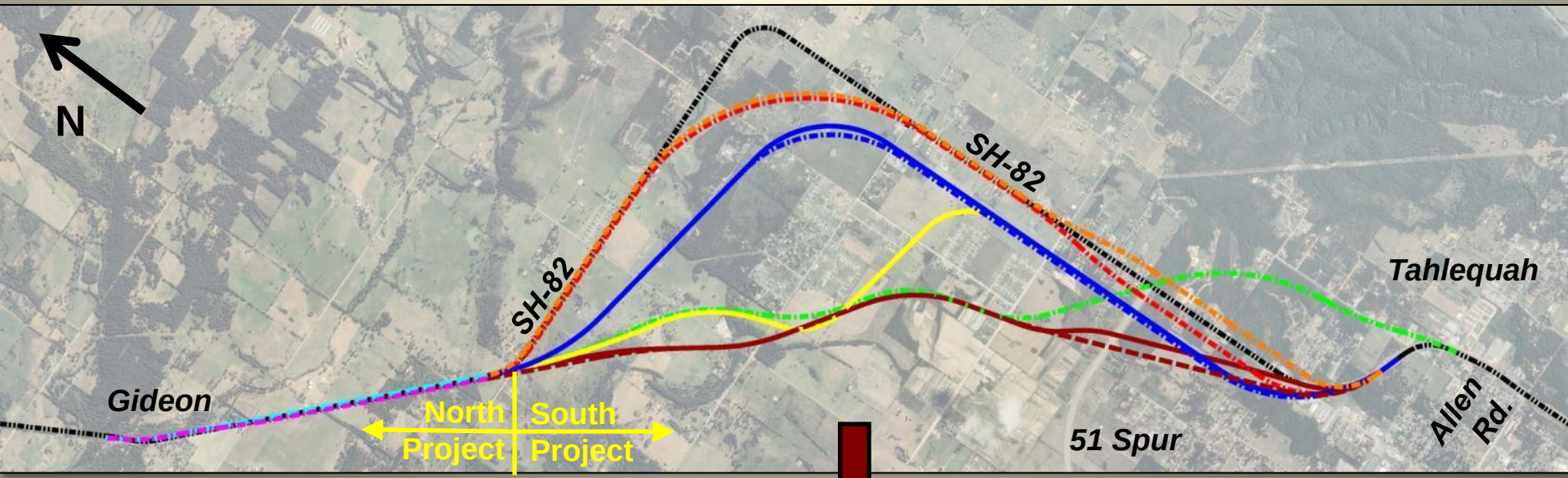
DEVELOPMENT OF ALTERNATIVES *cont'd...*

- **Developed Alternatives**
  - **South Project**
    - Parallel Offsets
    - New Alignments
  - **North Project**
    - East Offset
    - West Offset
- **Evaluated Alternatives**
  - **Right-of-Way, Utility & Environmental Impacts**
  - **Construction Costs**
  - **Refined and Reduced Number of Alternatives**
    - **South Project (Alt. 1, 1A, 3 & 5)**
    - **North Project (Alt. 7 & 8)**
  - **North & South Alternatives Combinations**



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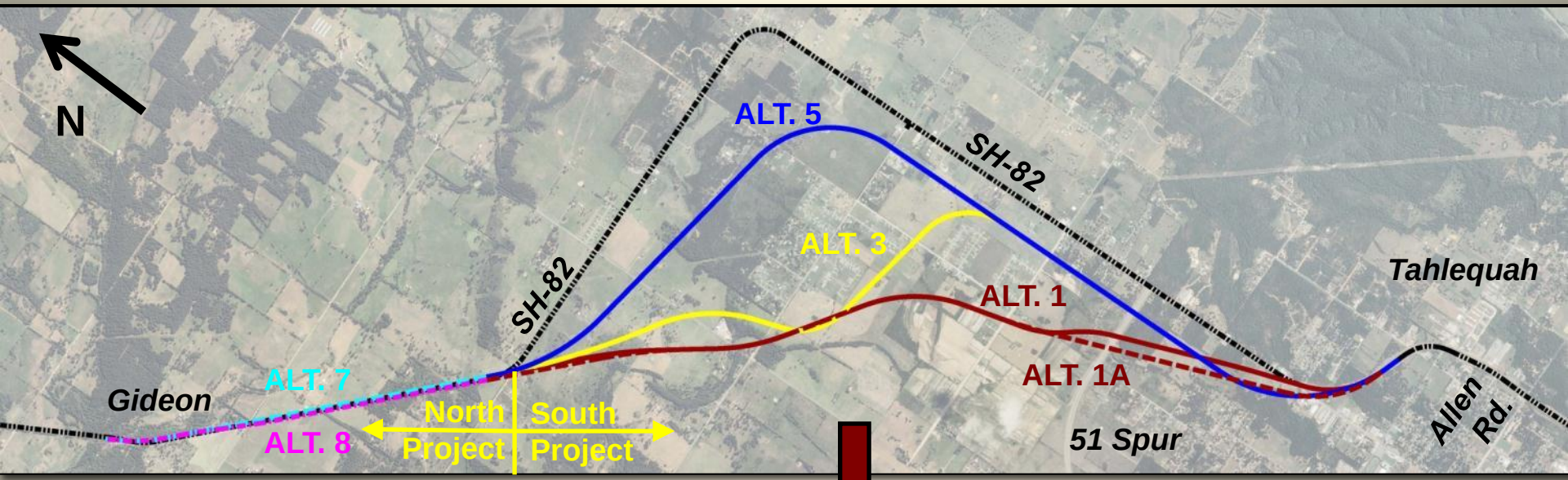

Identify Problem → Initial Data Collection → Preliminary Alternatives → **Alternative Screening**

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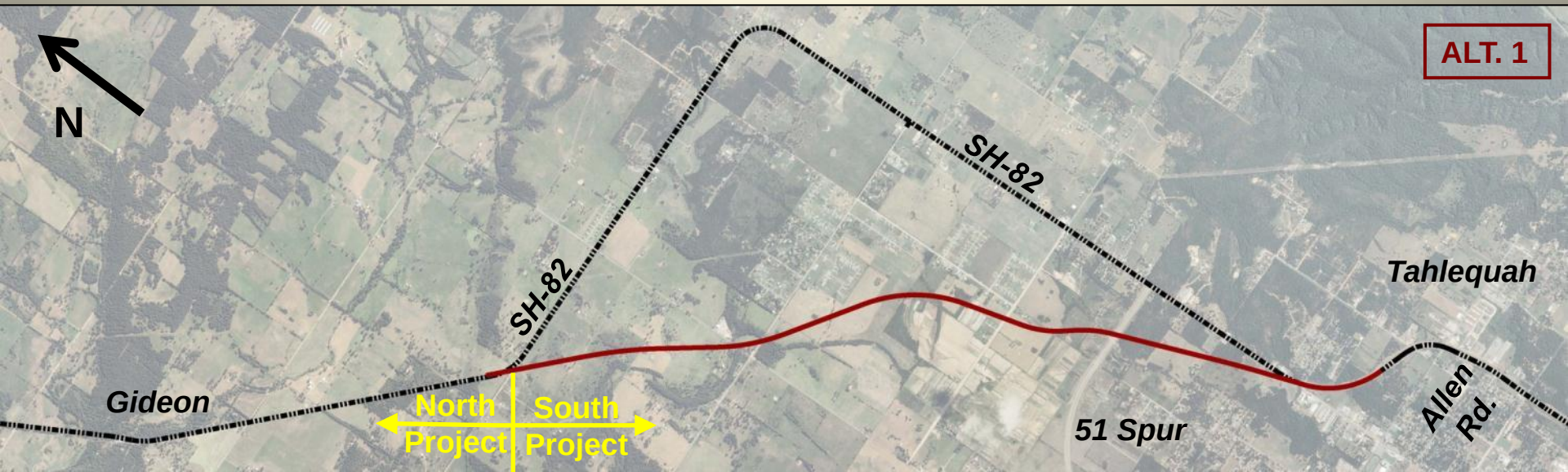
ALTERNATIVE
OVERVIEWS

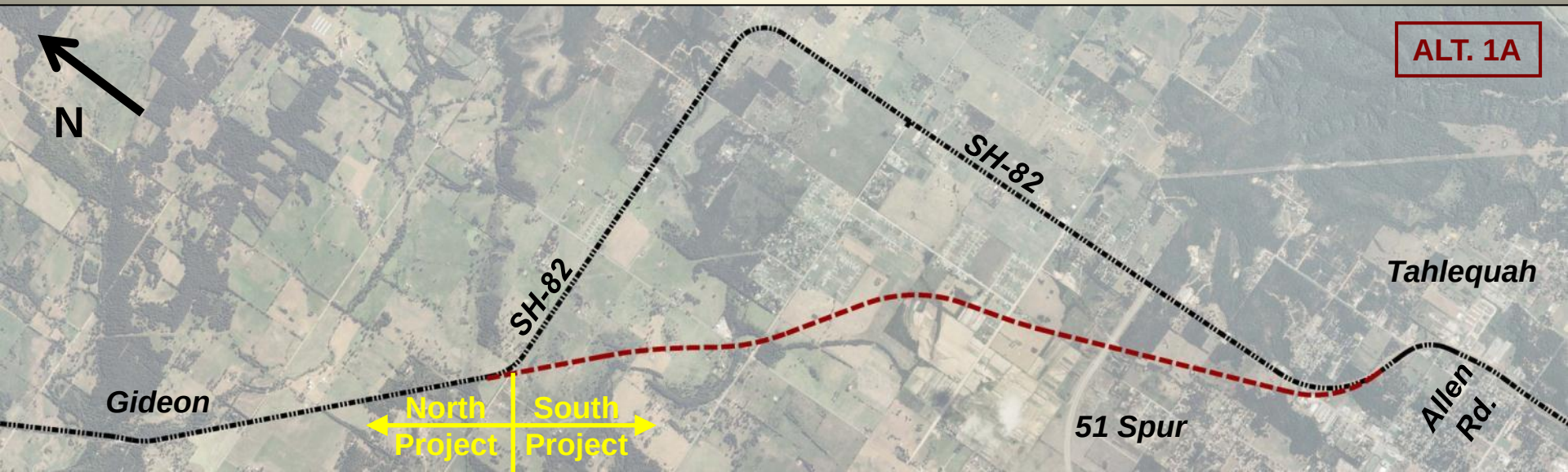
SOUTH PROJECT ALTERNATIVES
Alternative 1

- **Overview**
  - Continues Four Lane Loop Around Tahlequah
  - Northwesterly Path
  - Weaves Around Most Neighborhoods and Businesses
  - Existing Pavement to Remain as Local Road
- **Key Features**
  - New Alignment
  - Span Bridge Over Double Spring Creek
  - Skewed Intersection With 51 Spur
  - Highest Construction Cost
  - Estimated Overall Cost = $52.7M



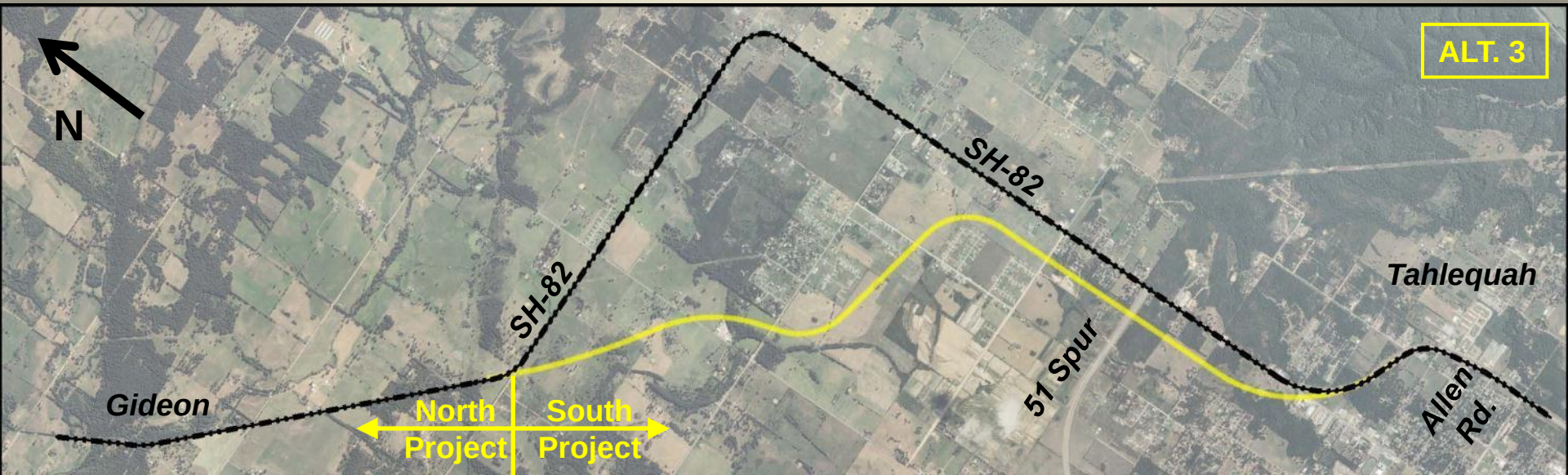
SOUTH PROJECT ALTERNATIVES
Alternative 1A

- **Overview**
  - Continues Four Lane Loop Around Tahlequah
  - Northwesterly Path With Less Curves
  - Weaves Around Most Neighborhoods and Businesses
  - Existing Pavement to Remain as Local Road
- **Key Features**
  - New Alignment
  - Span Bridge Over Double Spring Creek
  - Skewed Intersection With 51 Spur
  - Lowest Utility, Right-of-Way and Environmental Impacts
  - Estimated Overall Cost = $48.9M



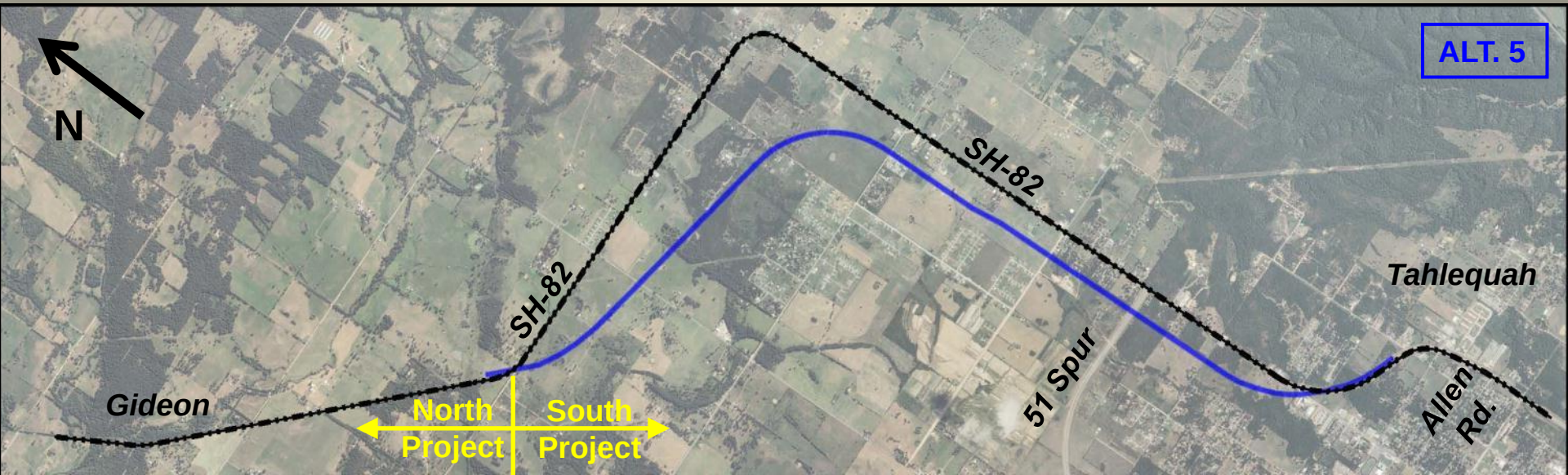
SOUTH PROJECT ALTERNATIVES
Alternative 3

- **Overview**
  - Continues Four Lane Loop Around Tahlequah
  - Parallels Existing Highway (850-Foot Offset) Then Northwesterly Path
  - Weaves Around Most Neighborhoods and Businesses
  - Existing Pavement to Remain as Local Road
- **Key Features**
  - New Alignment
  - No Span Bridges – 3 Bridge Boxes
  - Square Intersection With 51 Spur
  - Lowest Construction Cost
  - Affects Electric Transmission Line
  - Estimated Overall Cost = $46.8M



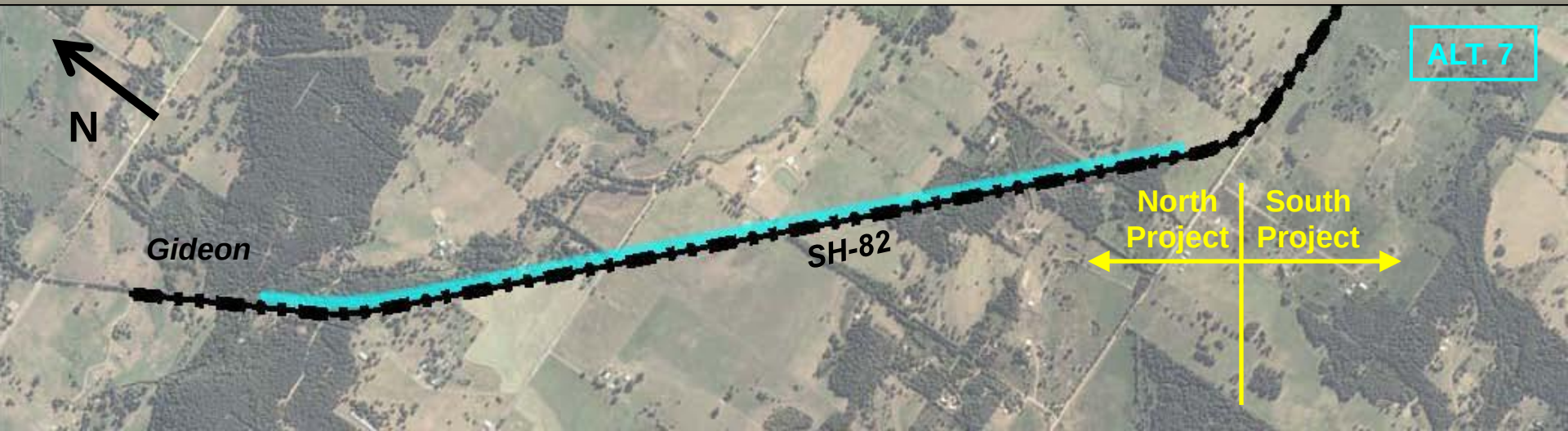
SOUTH PROJECT ALTERNATIVES
Alternative 5

- **Overview**
  - Continues Four Lane Loop Around Tahlequah
  - Parallels Existing Highway (850-Foot Offset for North/South Leg)
  - Existing Pavement to Remain as Local Road
- **Key Features**
  - New Alignment
  - No Span Bridges – 3 Bridge Boxes
  - Square Intersection With 51 Spur
  - Highest Utility, Right-of-Way and Environmental Impacts
  - Affects Electric Transmission Line
  - Estimated Overall Cost = $51.3M



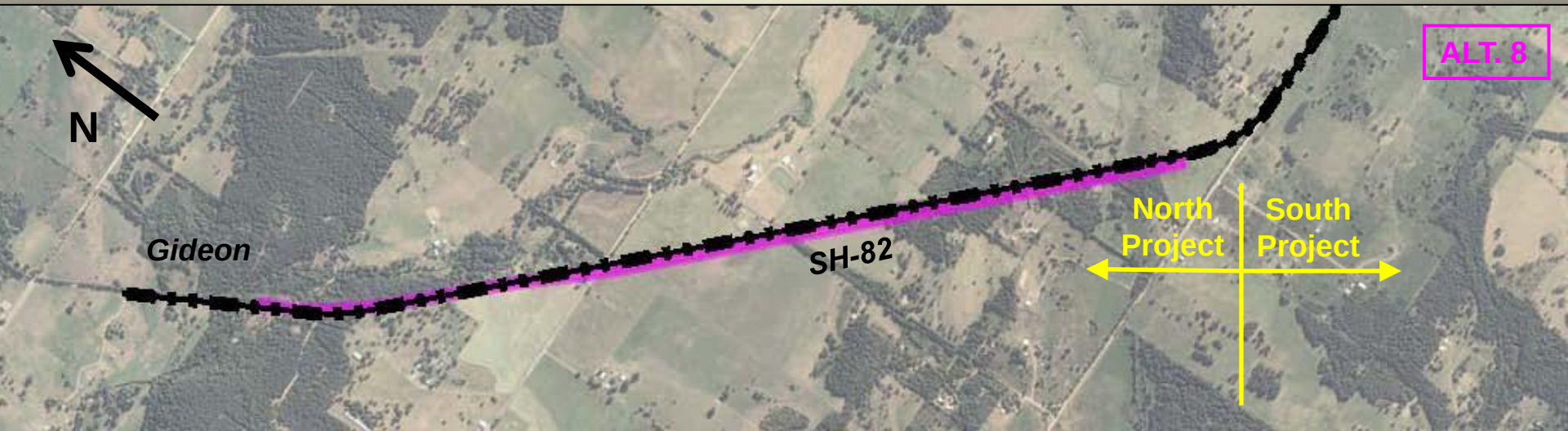
NORTH PROJECT ALTERNATIVES
Alternative 7 - East Offset

- **Overview**
  - Offset Alignment to East (44-Foot)
  - Matches Offset of Future Bridge Replacement Project Over Fourteen Mile Creek & Thompson Branch Creek
- **Key Features**
  - Existing Highway Pavement Removed Within Limits
  - Lower Construction Cost
  - Higher Utility Relocation Cost
  - Estimated Overall Cost = $17.5M

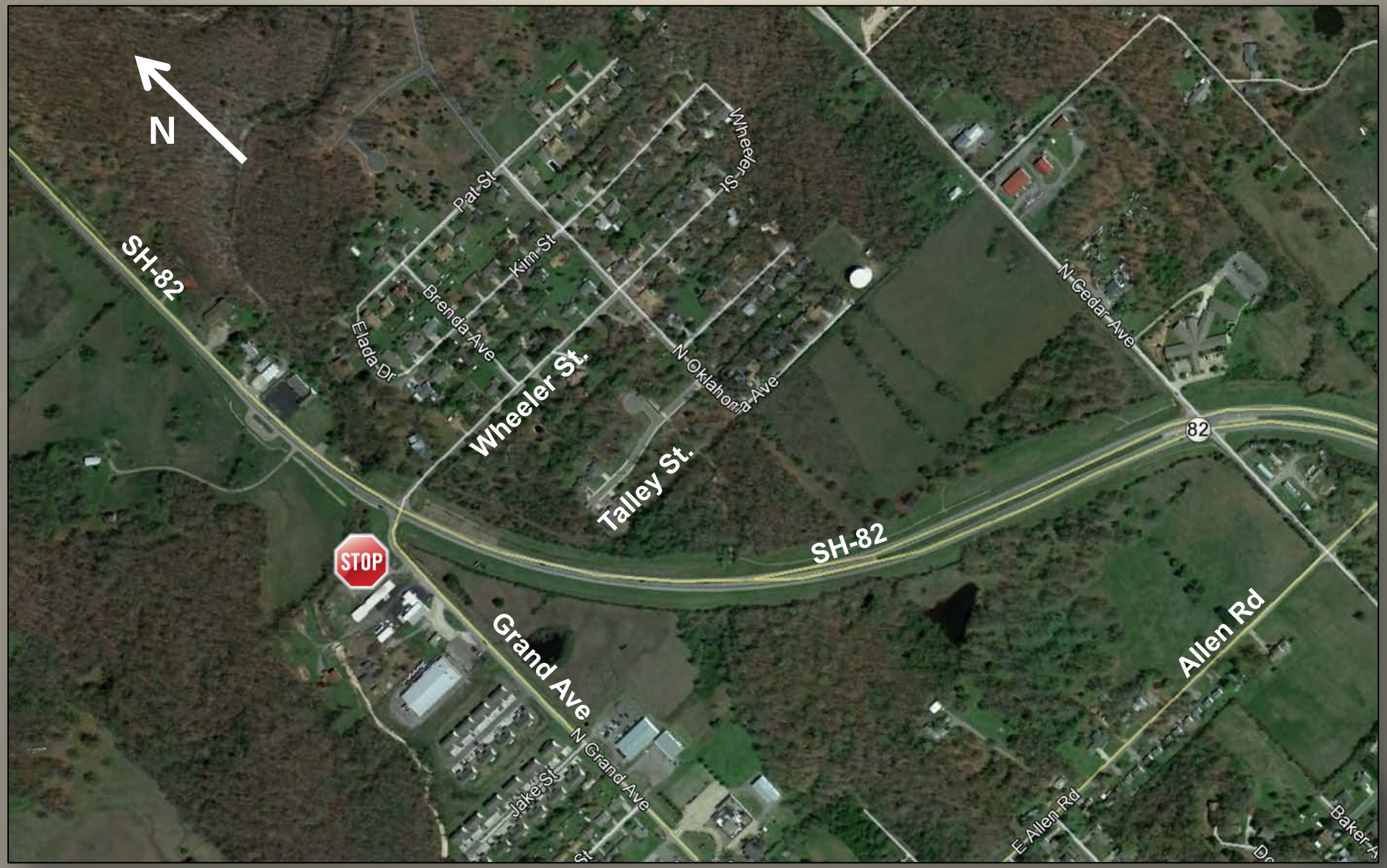


NORTH PROJECT ALTERNATIVES
Alternative 8 - West Offset

- **Overview**
  - Offset Alignment to West (44-Foot)
  - Crosses Over to East to Avoid Cemetery
  - Matches Offset of Future Bridge Replacement Project Over Fourteen Mile Creek & Thompson Branch Creek
- **Key Features**
  - Existing Highway Pavement Removed Within Limits
  - Higher Construction Cost
  - Lower Utility Relocation Cost
  - Estimated Overall Cost = $19.1M



GRAND AVENUE INTERSECTION OPTIONS



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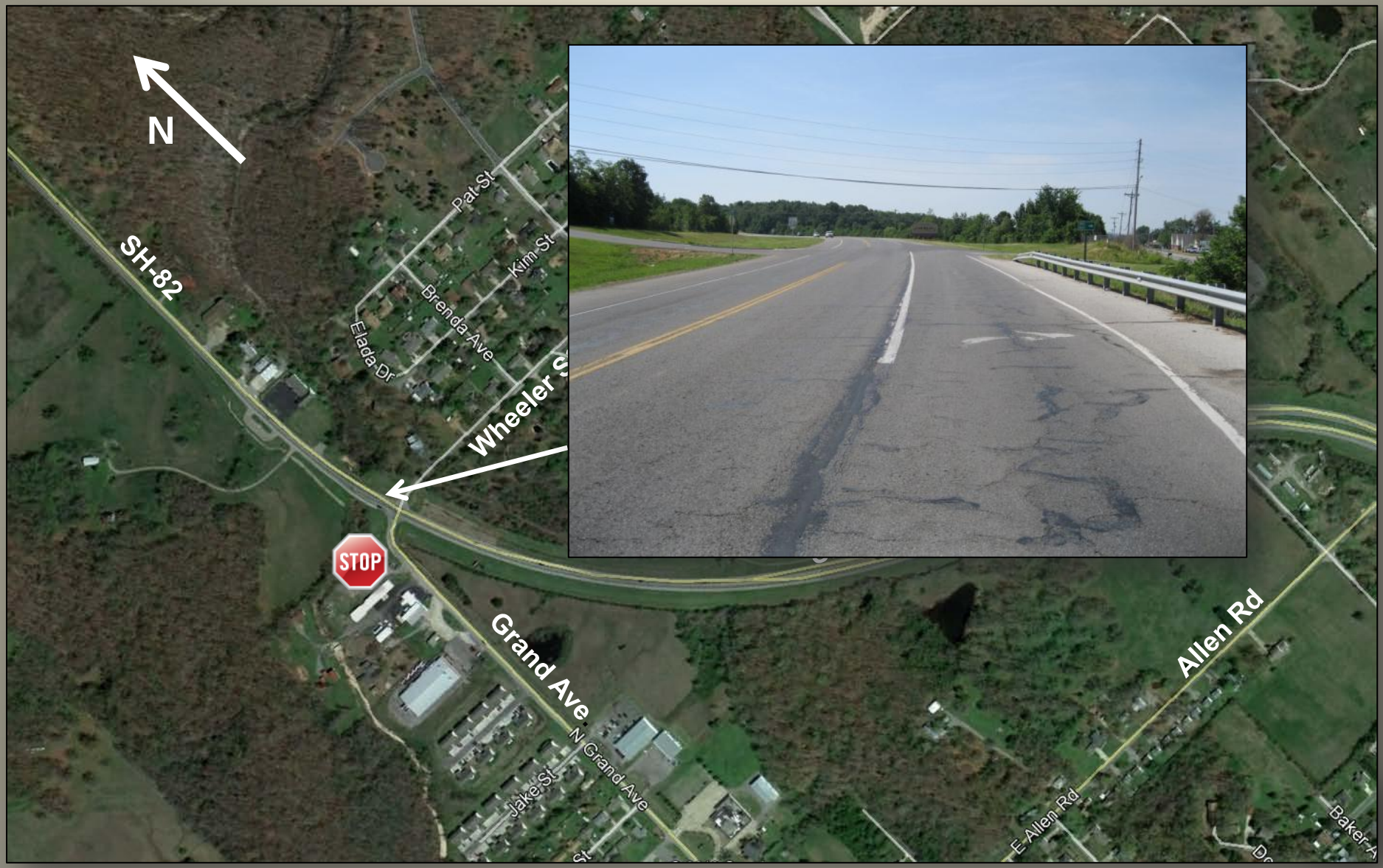
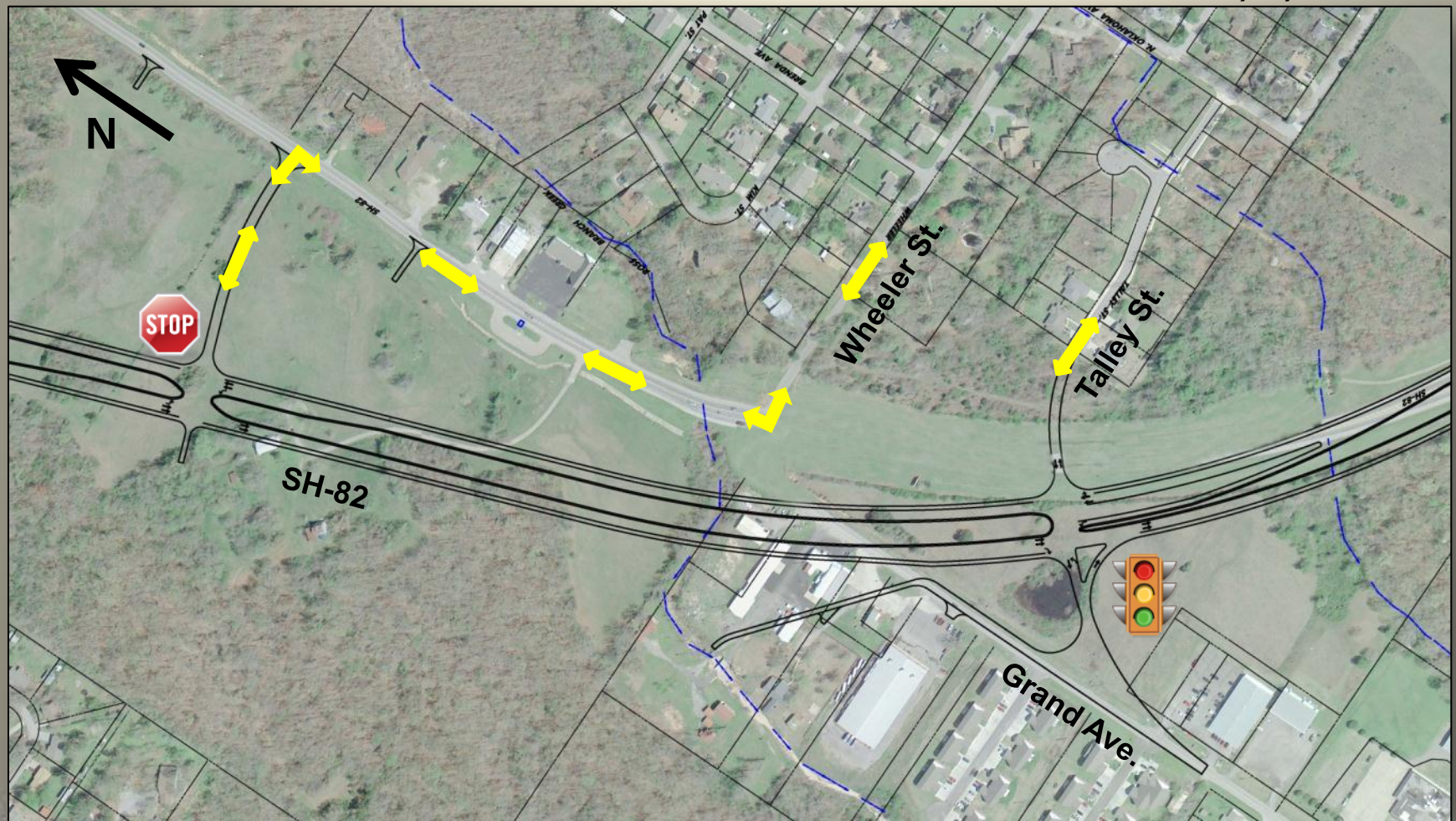


GRAND AVENUE INTERSECTION
Option No. 1

- **Key Features**
  - **4-Leg Intersection**
    - New Neighborhood Entrance
  - **Square Layout**
  - **Potentially Signalized**
  - **Longer Tangent on West Leg**
  - **Suggestion from Stakeholder Meeting**
  - **SH-82 Alternatives 1A, 3, and 5**



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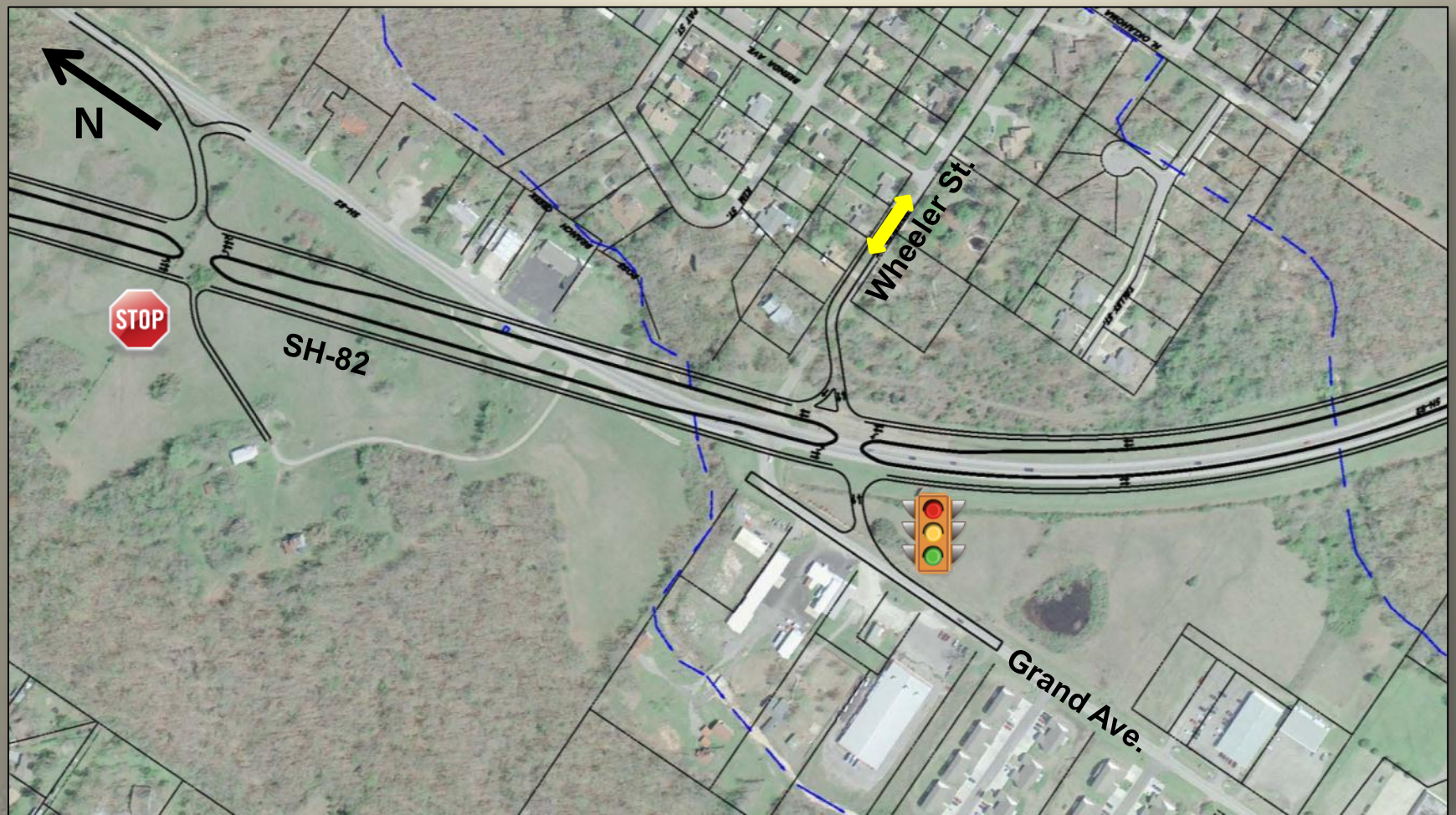
GRAND AVENUE INTERSECTION
Option No. 2

- **Key Features**
  - **4-Leg Intersection**
    - Realigns Existing Neighborhood Entrance
  - **Skewed Layout**
  - **Potentially Signalized**
  - **Shorter Tangent on West Leg**
  - **SH-82 Alternative 1**



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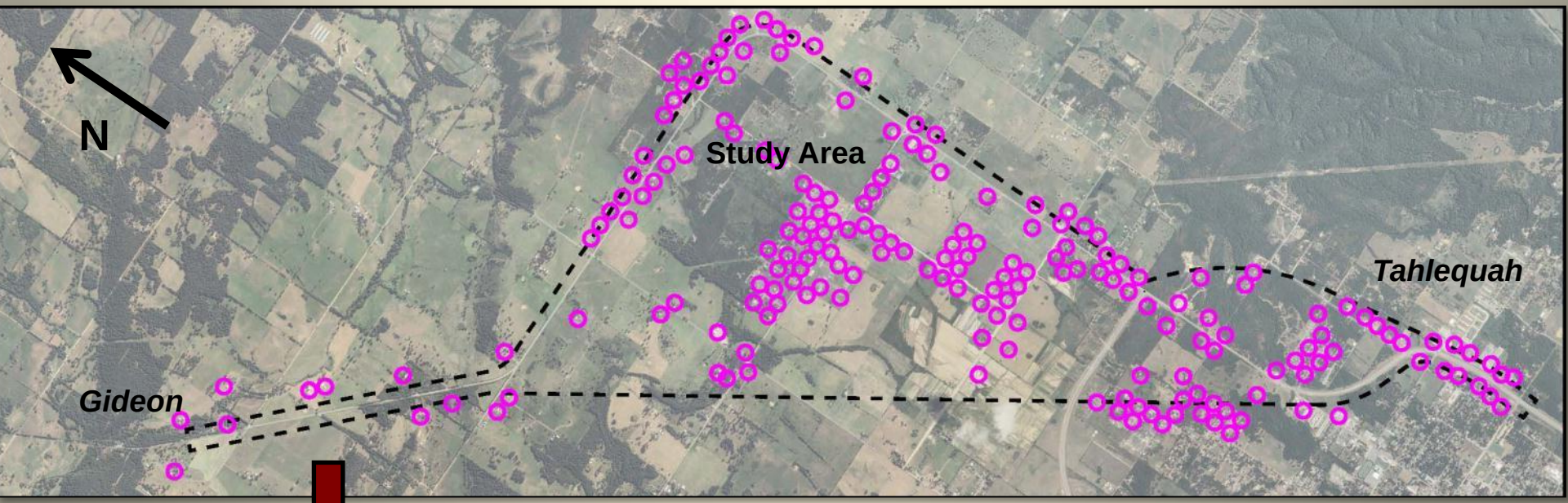
ENVIRONMENTAL
INVESTIGATIONS

ENVIRONMENTAL DATA COLLECTION

- **Environmental Data**
  - Homes and Businesses
  - Preliminary Noise Analysis
  - Demographic Data
  - Community Facilities
  - Hazardous Materials
  - Farmlands
  - Cultural Resources
  - Threatened and Endangered Species
  - Wetlands and Streams



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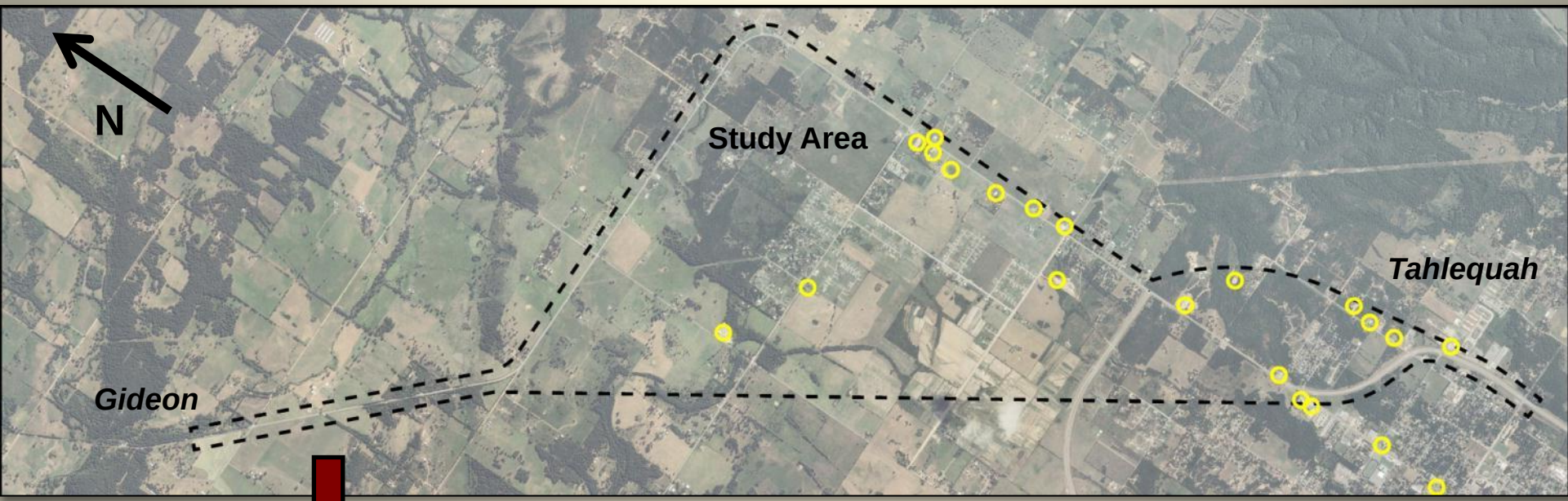

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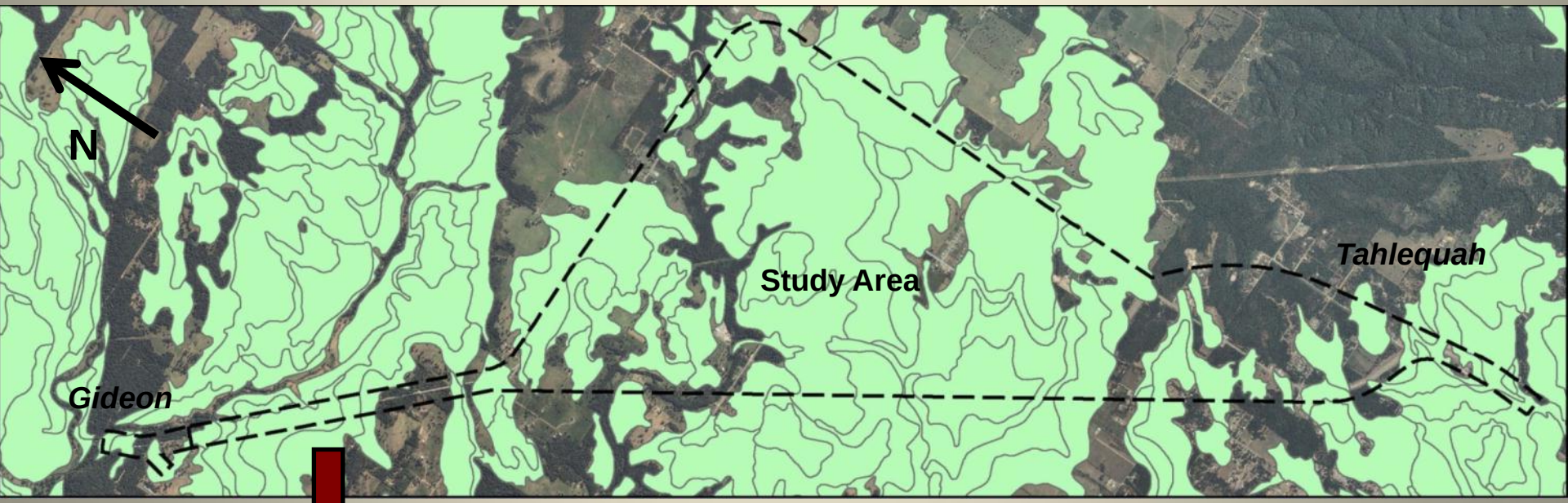

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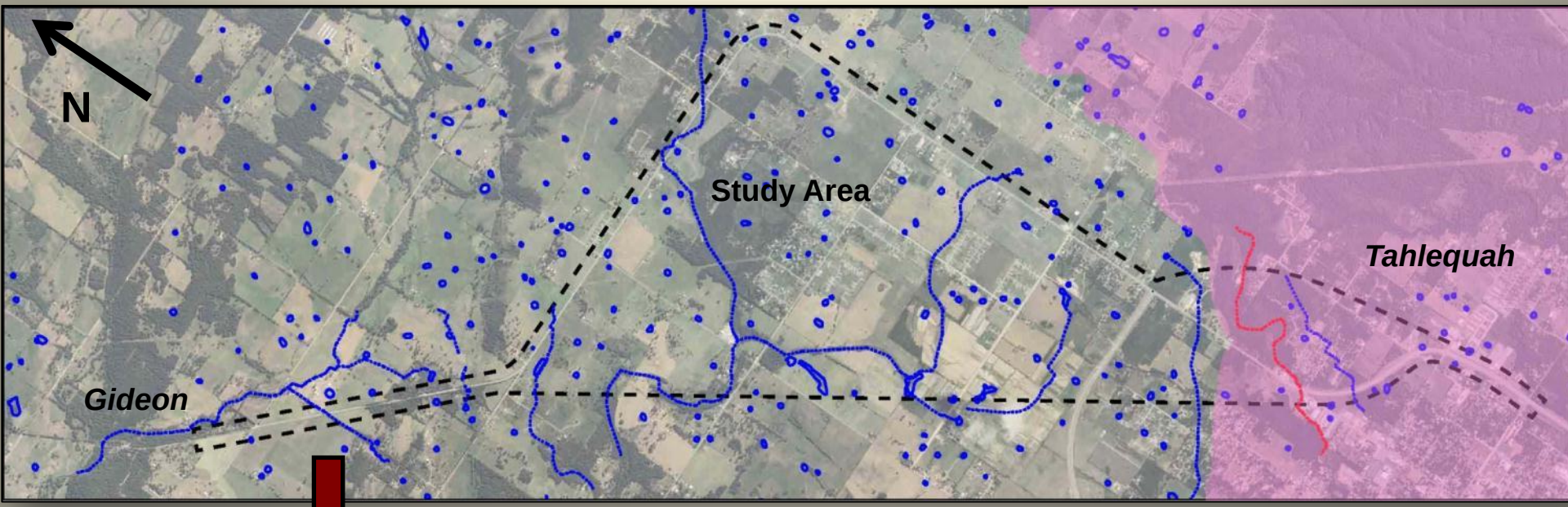

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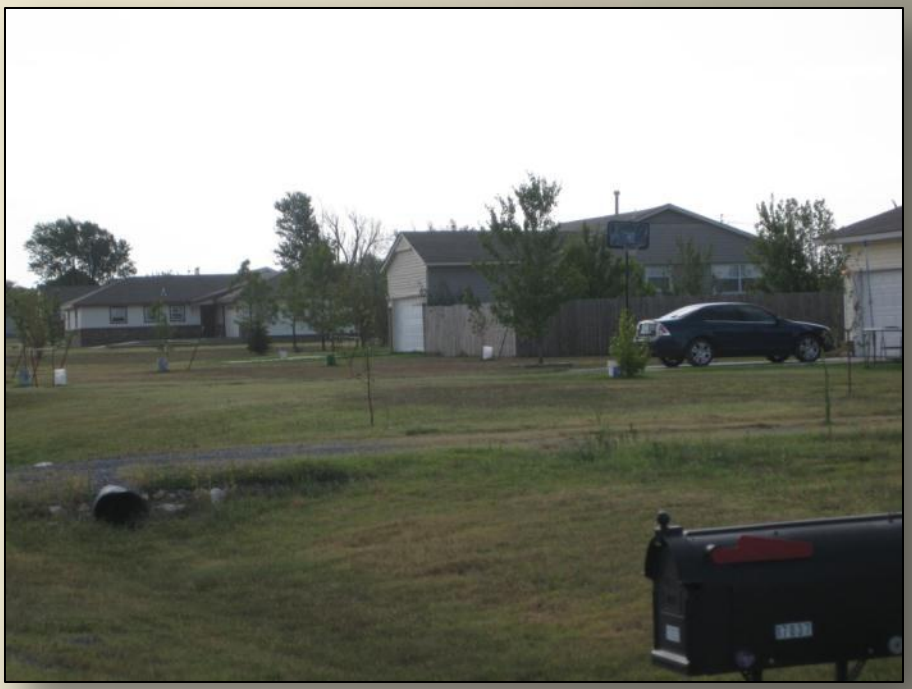
ENVIRONMENTAL IMPACTS

- **All of the Alternatives will Have Some Environmental Impacts**
- **Impacts are Anticipated to be in These Areas:**
  - **Relocation of Homes and Businesses**
  - **Community Facilities**
  - **Potential Impacts to Low-Income and Minority Populations**
  - **Farmlands**
  - **Potential for Hazardous Materials**
  - **Potential Historic Bridge**
  - **Wetland and Stream Impacts**
    - Outstanding Resource Water
    - Scenic River Watershed
    - Impaired Waterbody



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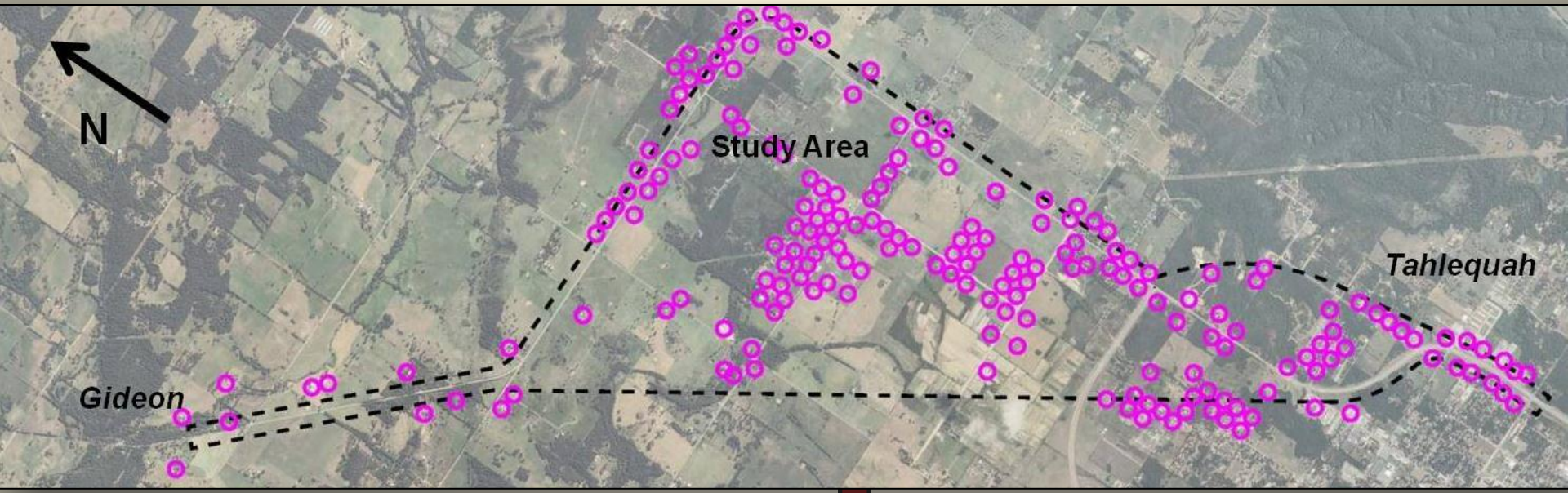

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  - **Wetland and Stream Impacts**
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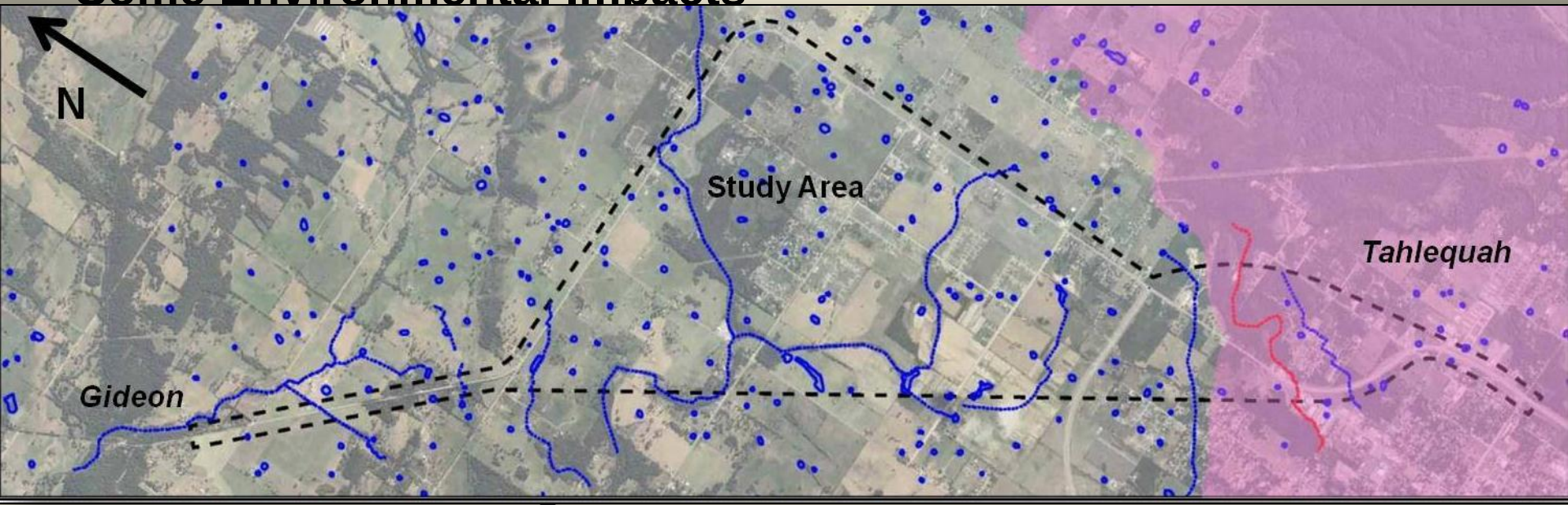

  - **Wetland and Stream Impacts**
    - Outstanding Resource Water
    - Scenic River Watershed
    - Impaired Waterbody

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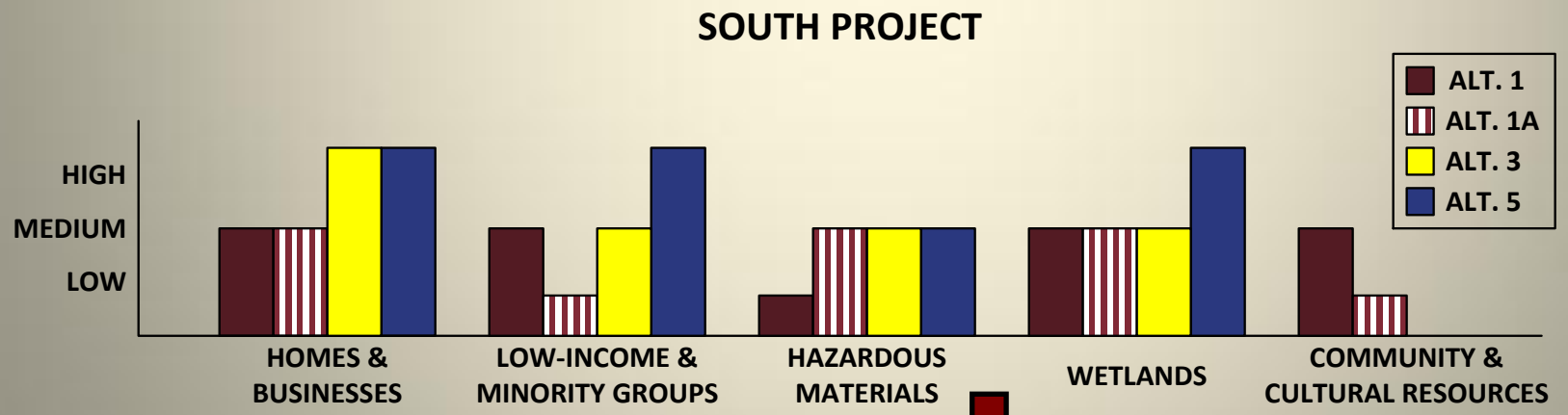
ENVIRONMENTAL IMPACTS *cont'd...*

- **Alt. 5 has the Highest Potential for Environmental Impacts**
  - More Homes and Businesses Affected
  - More Wetlands Affected
  - Higher Potential to Affect Low-Income and Minority Groups
- **Alt. 1A has the Fewest Potential Impacts**
- **Alt. 1 and 3 Have Moderate Impact Potential**
  - Alt. 1 Has Potential Community Facility Impacts
  - Alt. 3 Affects More Homes and Potentially Hazardous Materials



Identify Problem → Initial Data Collection → Preliminary Alternatives → **Alternative Screening**

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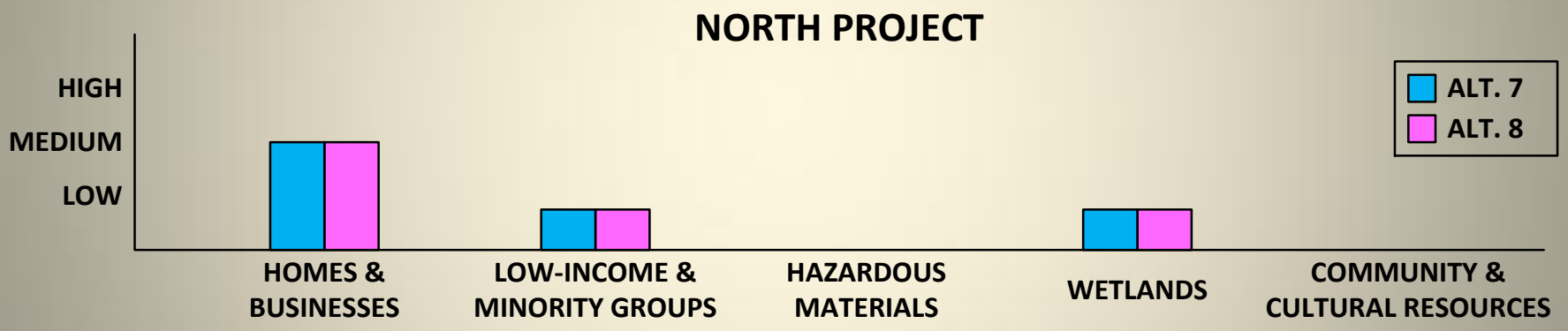
ENVIRONMENTAL IMPACTS *cont'd...*

- **Alternatives 7 and 8 Have Similar Impacts**
  - **Both Relocate Homes**
  - **Both Have Potential to Affect Low-Income and Minority Populations**
  - **Both Impact Wetlands**



Identify Problem | Initial Data Collection | Preliminary Alternatives | **Alternative Screening**

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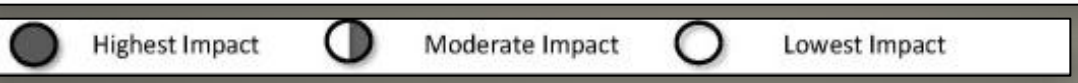
SUMMARY

ALTERNATIVES SUMMARY

SOUTH PROJECT	CONSTRUCTION COST	UTILITIES	RIGHT-OF-WAY	ENVIRONMENTAL	PUBLIC INPUT	TOTAL COST (Million)	SUMMARY
ALT. 1						$52.7	· Highest Construction Cost · Lower Utility Cost · Lowest Environmental Impacts · Moderate ROW Impacts
ALT. 1A						$48.9	· Moderate Construction Cost · Lowest Utility Cost · Lowest ROW and Environmental Impacts
ALT. 3						$46.8	· Lowest Construction Cost · Higher Utility Cost · Moderate RW and Environmental Impacts · Lowest Total Cost
ALT. 5						$51.3	· Moderate Construction Cost · Highest Utility Cost · Highest ROW and Environmental Impacts

NORTH PROJECT	CONSTRUCTION COST	UTILITIES	RIGHT-OF-WAY	ENVIRONMENTAL	PUBLIC INPUT	TOTAL COST (Million)	SUMMARY
ALT. 7						$17.5	· Lower Construction Cost · Higher Utility Cost · Lower ROW Impacts · Even Environmental Impacts
ALT. 8						$19.1	· Higher Construction Cost · Lower Utility Cost · Higher ROW Impacts · Even Environmental Impacts



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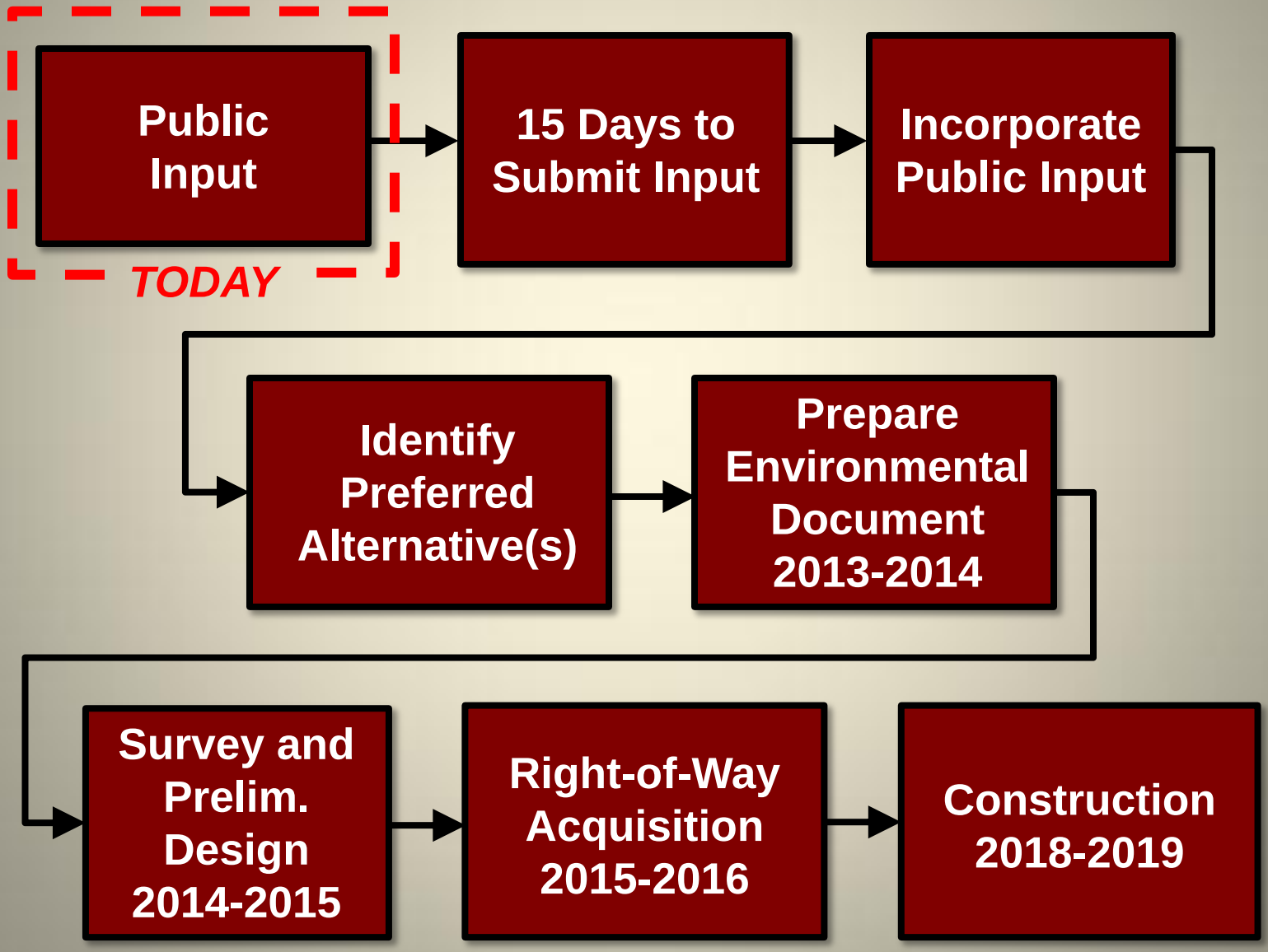
NEXT STEPS



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THANK YOU!

Please Submit Your Comments by:
August 9, 2013

- ✓ **Leave Your Comment Form Here Tonight**
- ✓ **Mail the Comment Form Back to ODOT:**
  Environmental Programs Division
  200 NE 21st Street
  Oklahoma City, OK 73105
- ✓ **Email Your Comments to: ENVIRONMENT@ODOT.ORG**
- ✓ **Information is available at http://www.okladot.state.ok.us/meetings/other.php**

QUESTIONS?

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