WELCOME

Public Hearing For SH-82
In Cherokee County

Environmental Assessment Findings

August 24, 2017

Agenda for Public Hearing

- **Presentation**

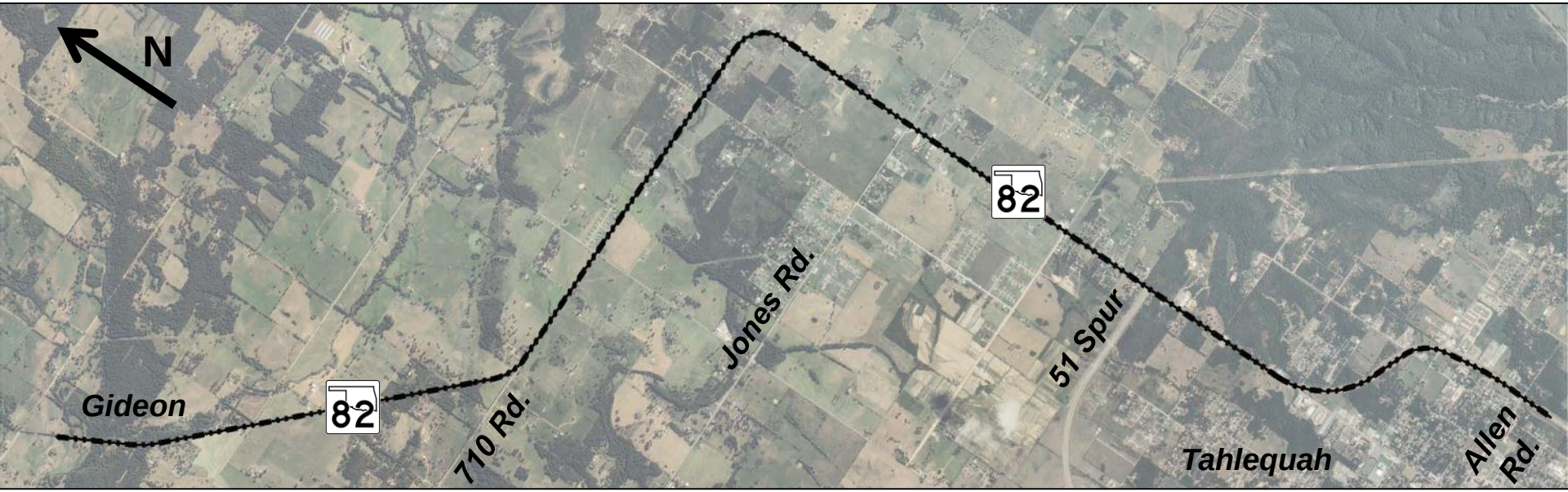
- **Public Comments**
  - Sign in to Give a Comment
  - Speak Into the Microphone
  - State Your Full Name
  - Comments are Limited to 3 Minutes
  - All Comments Will Be Recorded by the Court Reporter
  - ODOT Will Not Answer Questions During the Comment Portion of the Hearing

- **Questions / Discussion With ODOT Staff**
  - Additional Opportunity to Give Comments to the Court Reporter Privately

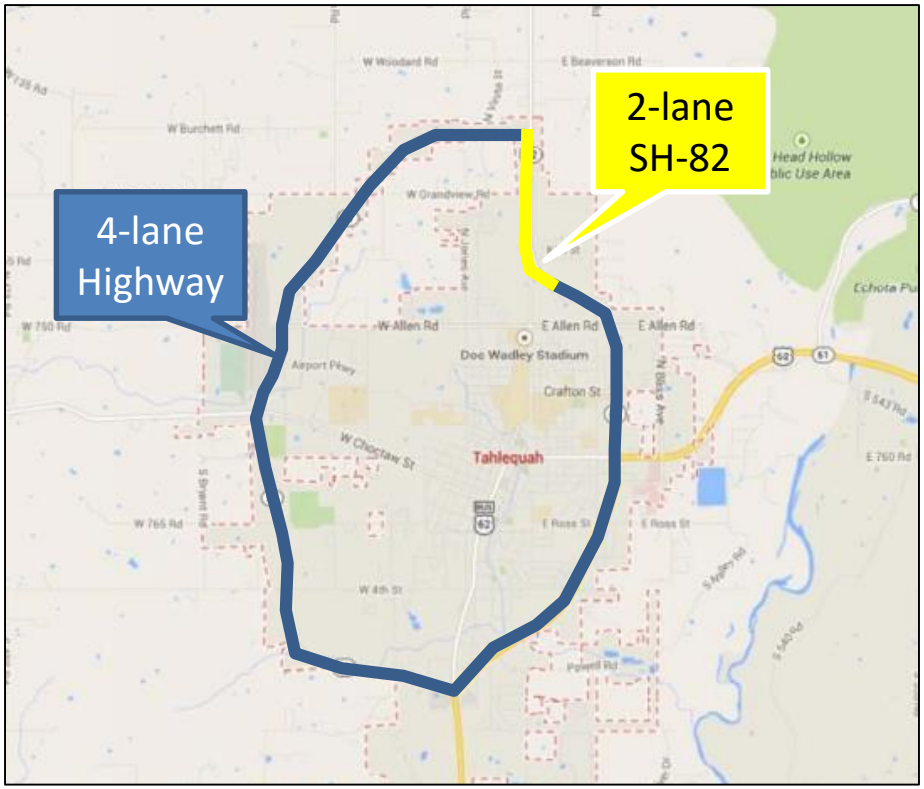
GARVER

Purpose of the Public Hearing

- Provide a Project Overview
- Review Alternatives
- Discuss Agency and Public Involvement
- Discuss Preliminary Social, Economic and Environmental Impacts
- Provide Opportunities to Comment

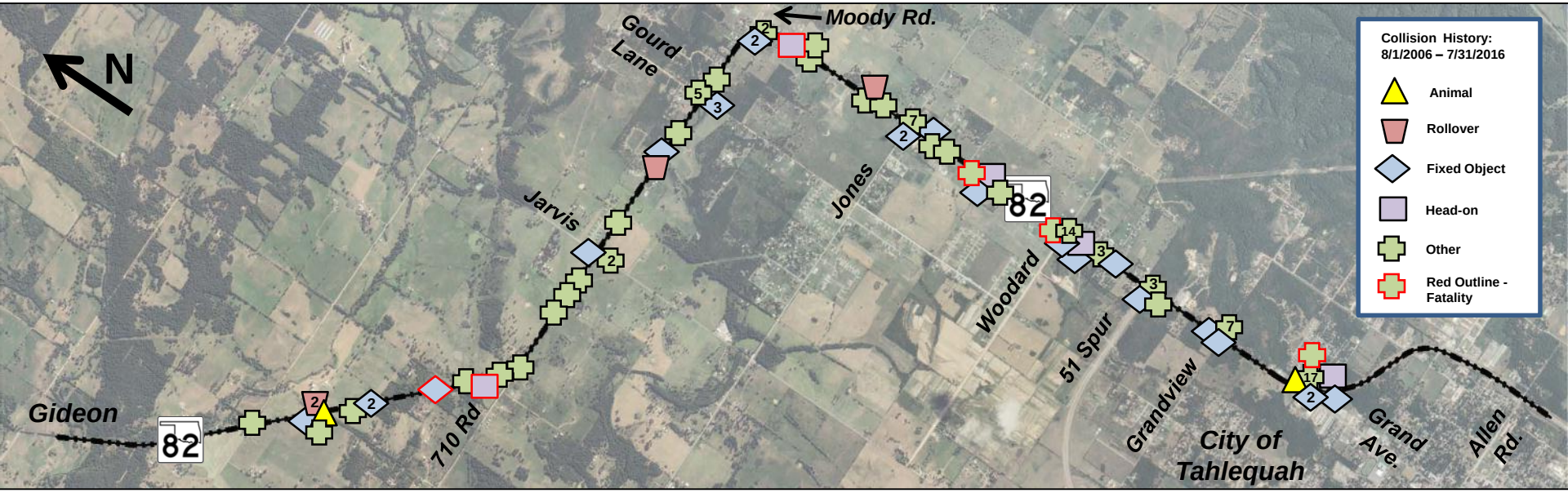


Purpose of the Project



- **Complete the Multi-Lane Loop Around Tahlequah to Ease Traffic Congestion**
  - Traffic on SH-82 Will Become More Congested and Experience Significant Delay by 2045
  - Current Traffic: 8,140 Vehicles/Day (10% Trucks)
  - Projected Traffic (2045): 12,340 Vehicles/Day

Purpose of the Project



- **Reduce Accidents and Improve the Safety of the Roadway**
  - 227 Accidents in the Last 10 Years (2006-2016)
  - Over Half of These Involved Either Injuries (166 People) or Fatalities (9 People)
  - Rates of Severe Accidents (Injury or Fatality) are 50% Higher Than the State Average
  - Designated Safety Corridor by Oklahoma Highway Patrol

Existing Conditions Warrant Improvement

- **Roadway Deficiencies**
  - Inadequate Sight Distance
    - Rolling Terrain – Vertical Alignment
    - Sharp Curves – Horizontal Alignment
    - Blind Intersections
  - Narrow Shoulders


Sag Curve North of W. 710 Rd.

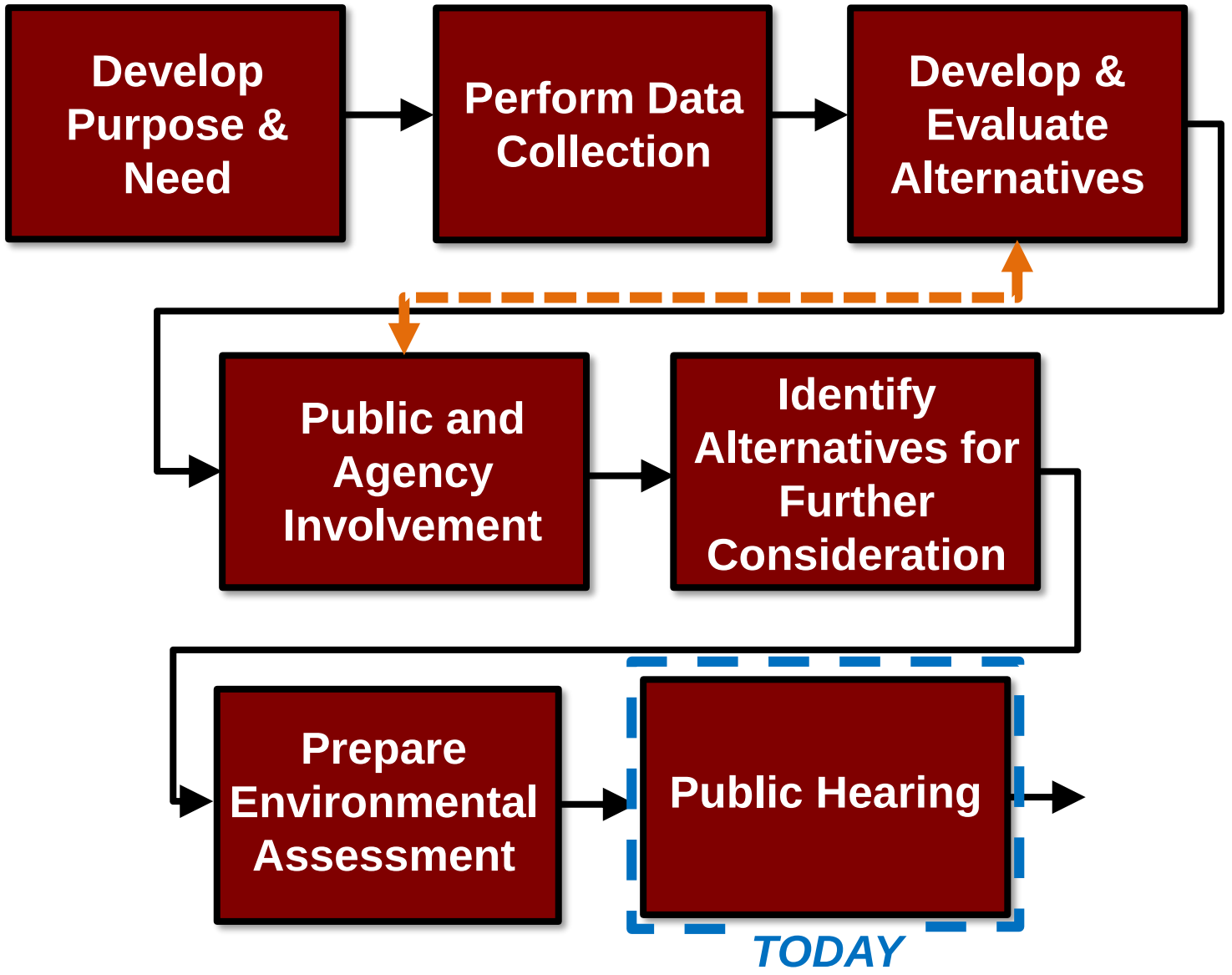
Horizontal Curve at Moody's Corner


Crest Curve North of 51-Spur


Blind Intersection at W. 710 Rd.

GARVER

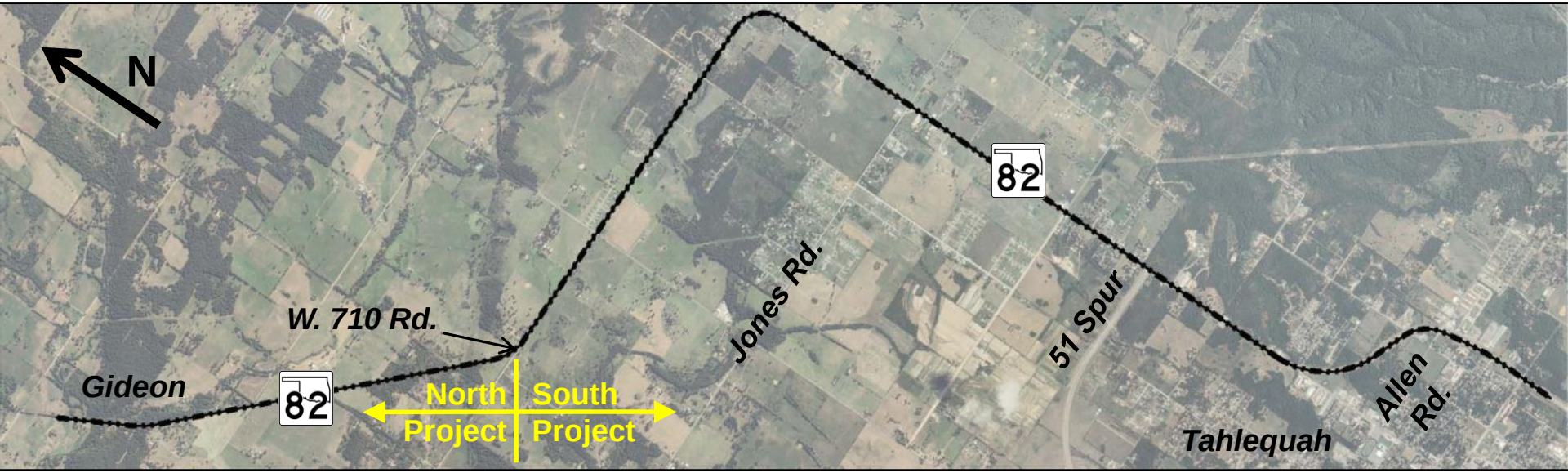
Environmental Assessment Process




DEVELOPMENT OF
ALTERNATIVES
AND
PUBLIC INVOLVEMENT

North and South Project Limits

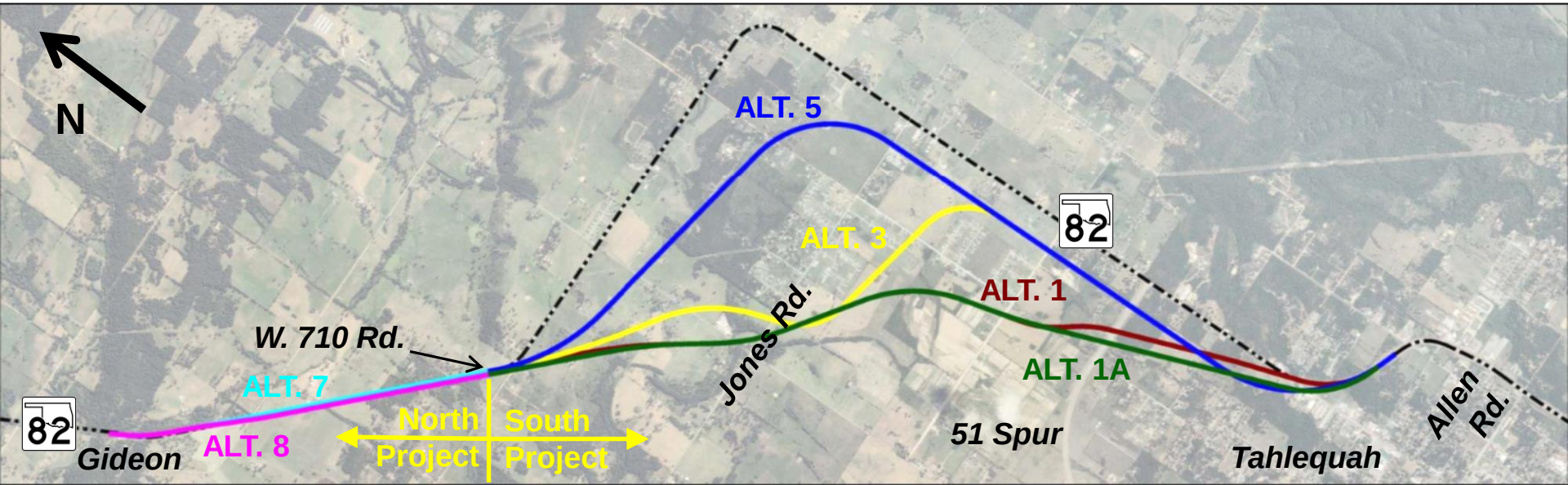
- **Corridor is Split Into Two Projects**
  - South Project – From Bertha Parker Bypass. to W. 710 Rd.
  - North Project – From W. 710 Rd. to Gideon, OK
- **North and South Project Alternatives Are Compatible**



4-Lane Divided Alternatives
Development and Initial Screening

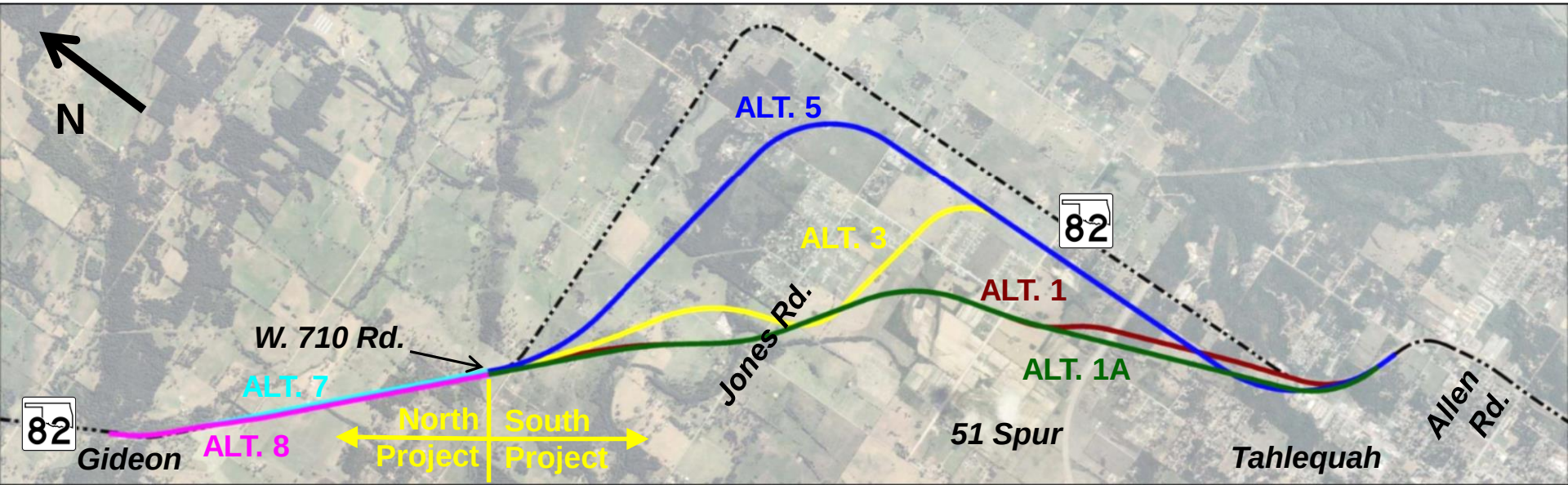
- **Developed 10 Initial Alternatives**
  - 8 Alternatives for South Project
  - 2 Alternatives for North Project
  - Designed for 65 mph

- **ODOT Refined and Reduced the Number of Alternatives**
  - South Project (Alt. 1, 1A, 3 & 5)
  - North Project (Alt. 7 & 8)



First Public Meeting

- **July 25, 2013**
  - Presented Alternatives 1, 1A, 3, 5, 7, and 8 (4-Lane Divided)
  - Over 170 People Attended the Meeting
  - 43 Individuals and Agencies Submitted Written Comments
  - Positive Feedback was Received for Alternatives 1 and 1A
  - Some Individuals Requested ODOT Look at Widening Existing SH-82 to a 5-Lane Roadway



First Public Meeting

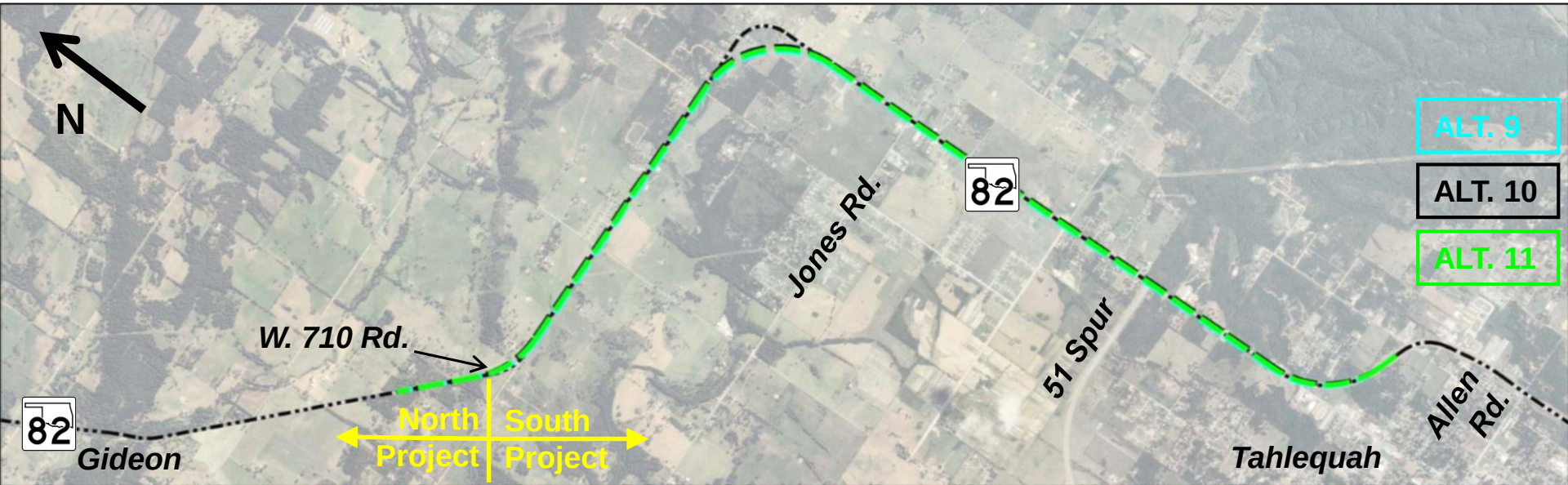
- **July 25, 2013**
  - Presented Alternatives 1, 1A, 3, 5, 7, and 8 (4-Lane Divided)
  - Over 170 People Attended the Meeting
  - 43 Individuals and Agencies Submitted Written Comments
  - Positive Feedback was Received for Alternatives 1 and 1A
  - Some Individuals Requested ODOT Look at Widening Existing SH-82 to a 5-Lane Roadway

- **In Response to Public Feedback, ODOT Developed Six Additional Alternatives (Five-Lane) for the South Project**
  - Alternatives 9 Through 14

GARVER

5-Lane With Center Turn Lane Alternatives
Curb & Gutter

- **Overview**
  - Developed in Response to Public Feedback
  - Multiple Offsets
  - Designed for 55 mph
  - Includes Curb & Gutter and Storm Sewer



5-Lane With Center Turn Lane Alternatives
Open Shoulder

- **Overview**
  - Developed in Response to Public Feedback
  - Multiple Offsets
  - Designed for 65 mph
  - Includes Open Shoulders and Ditches

Second Public Meeting (Open House)

- **January 27, 2015**
  - Presented Alternatives 1, 1A, 3, 5, 7, and 8 (4-Lane Divided) AND Alternatives 9 Through 14 (5-Lane)
  - Approximately 200 People Attended the Open House
  - 86 Individuals and Agencies Submitted Written Comments
  - Most of the Positive Feedback was Received for Alternatives 1 and 1A
  - Positive Feedback was Received for the 5-Lane Alternatives
  - Request for Hybrid Alternatives

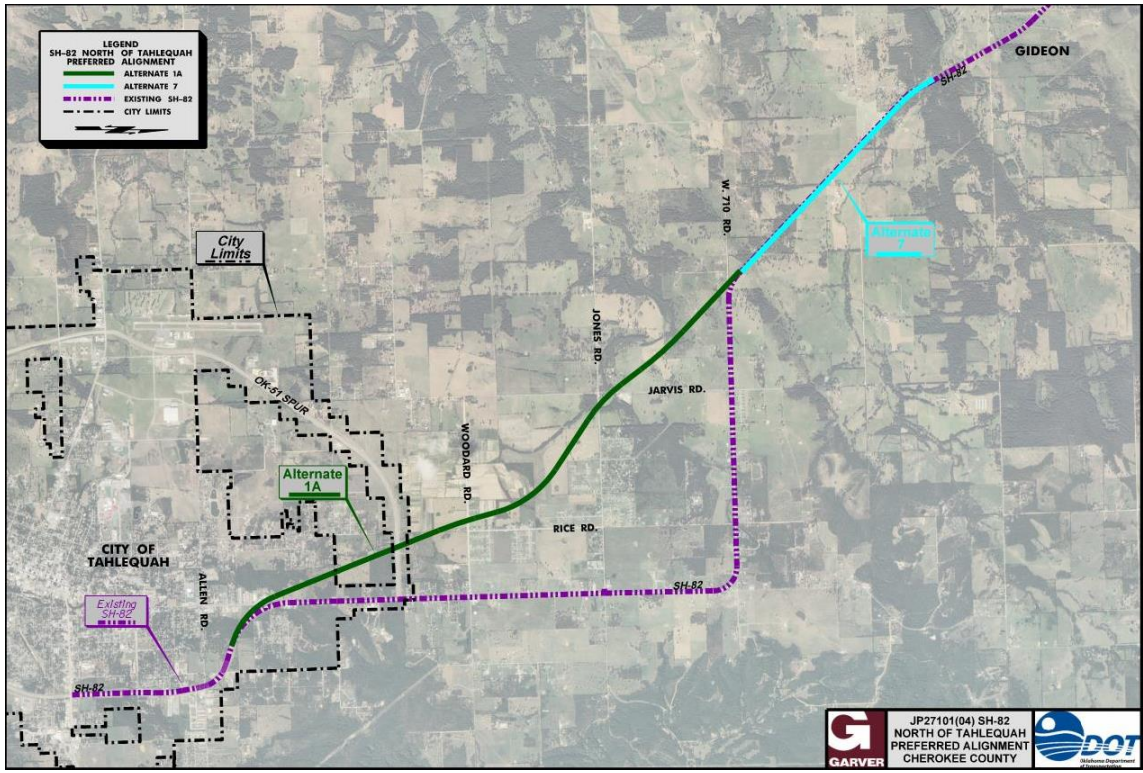
GARVER

Initial Preferred Alternative

- **ODOT Evaluated all of the Alternatives for:**
  - How they Meet the Purpose and Need
    - Roadway Capacity
    - Safety
    - Complete the Multi-Lane Loop Around Tahlequah
  - Impacts to the Community and the Environment
  - Cost
  - Constructability
  - Agency and Public Input

- **In April 2015, ODOT Identified Alternative 1A (South Project) and Alternative 7 (North Project) as the Preferred Alternatives**

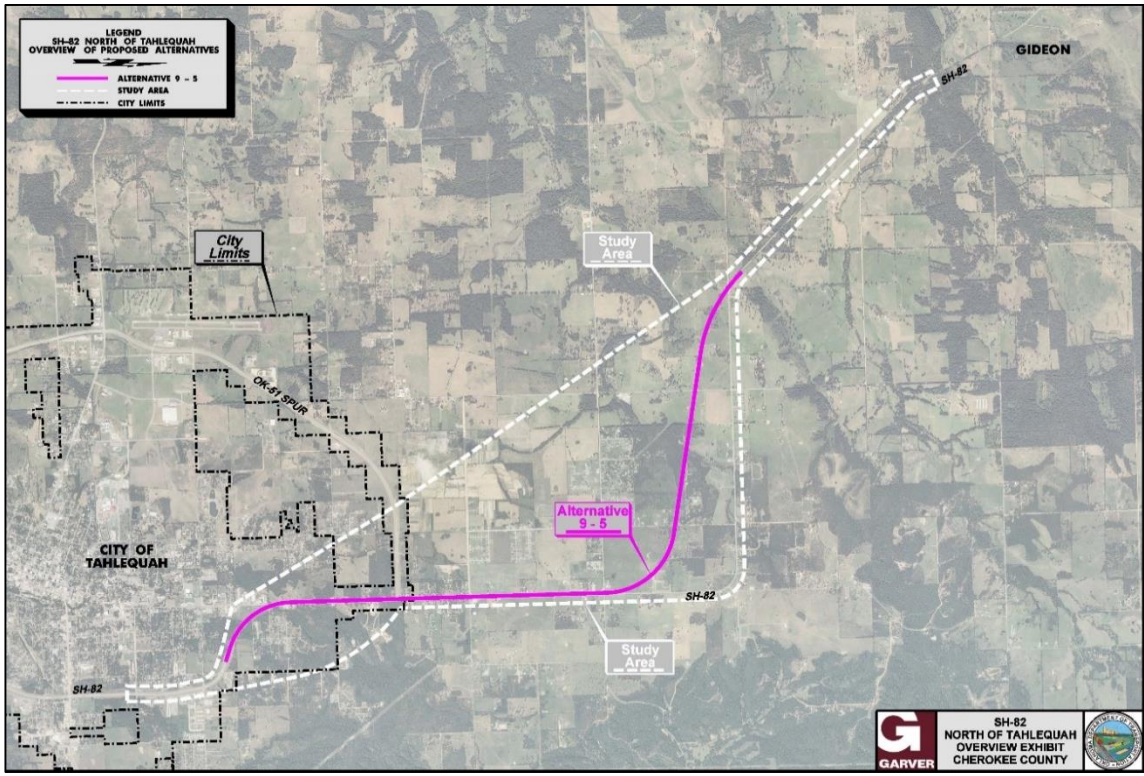
- **Notices Were Mailed in June 2015**

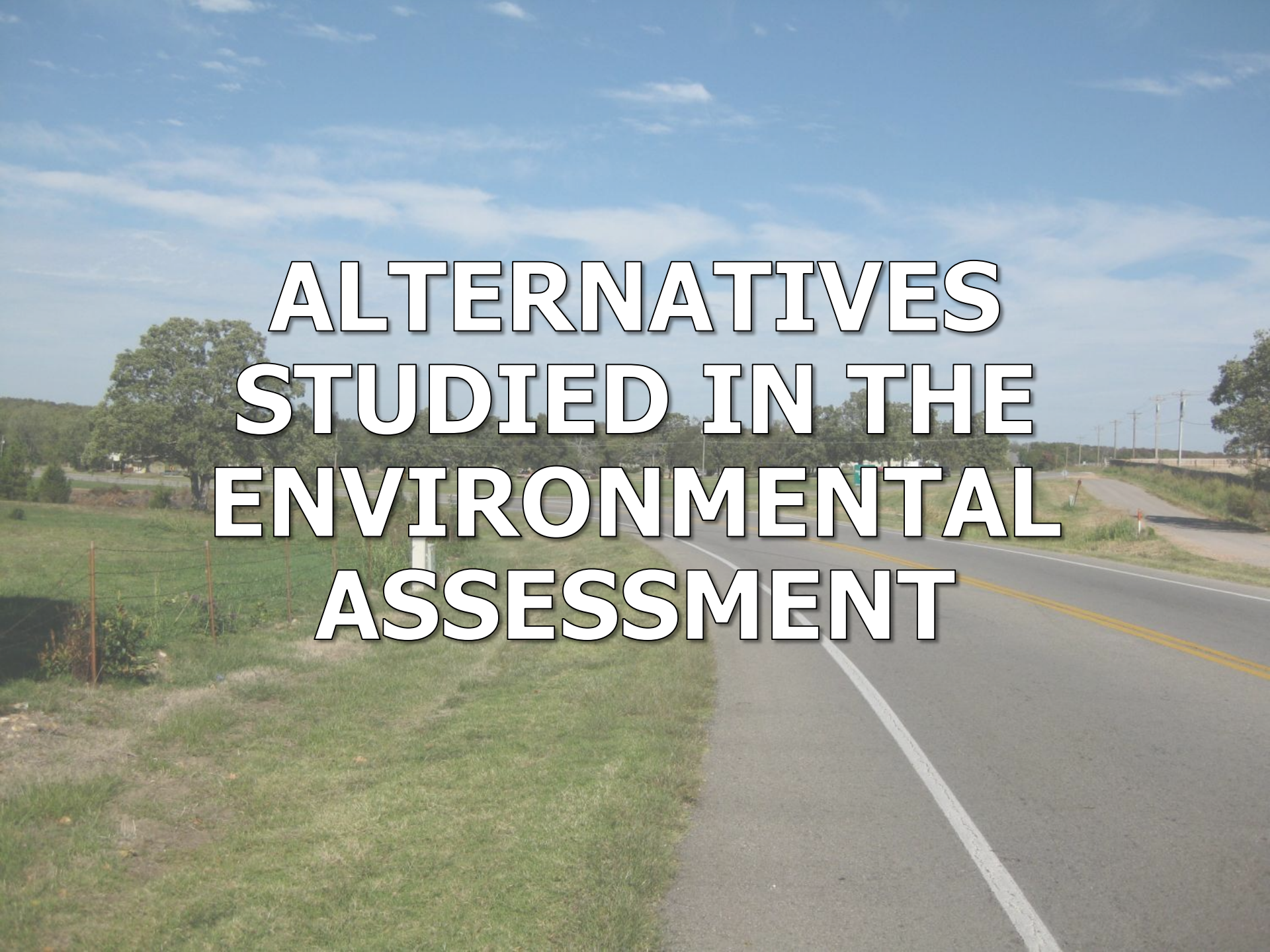


Reconsideration of Hybrid Alternative

- **In August 2015 the City of Tahlequah and Cherokee County Requested that ODOT Change the Preferred Alternative to a Hybrid of Alternative 9 and Alternative 5**
  - 5-Lane Section Offset 45 Feet From Existing Alignment From Bertha Parker Bypass to Just North of Jones/Steely Hollow Road (Alt. 9)
  - Transition to Divided 4-Lane Section North and West to W. 710 Road (Alt. 5)

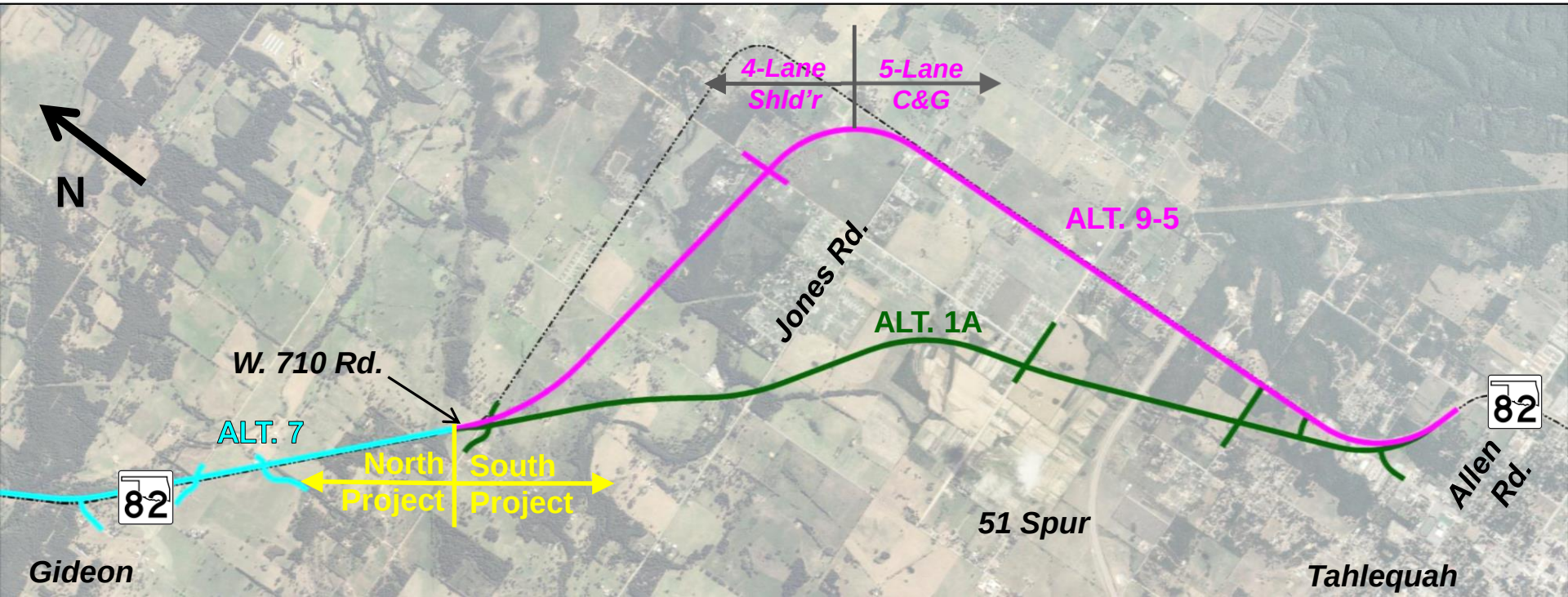
- **ODOT Agreed to Consider Alternative 9-5 Along With Alternatives 1A and 7 in the Environmental Assessment**




ALTERNATIVES
STUDIED IN THE
ENVIRONMENTAL
ASSESSMENT

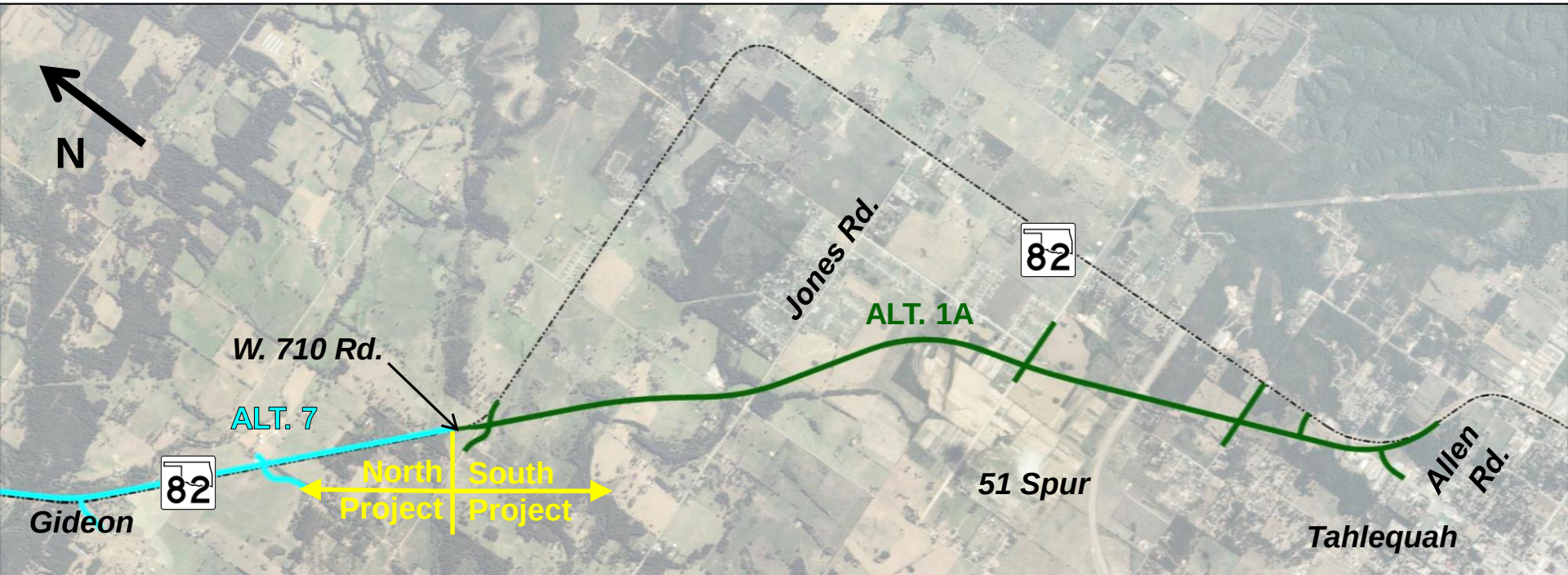
Alternatives Studied for the Environmental Assessment

- **Three Alternatives Moved Forward**
  - South Project – **Alt. 1A** and **Alt. 9-5**
  - North Project – **Alt. 7**



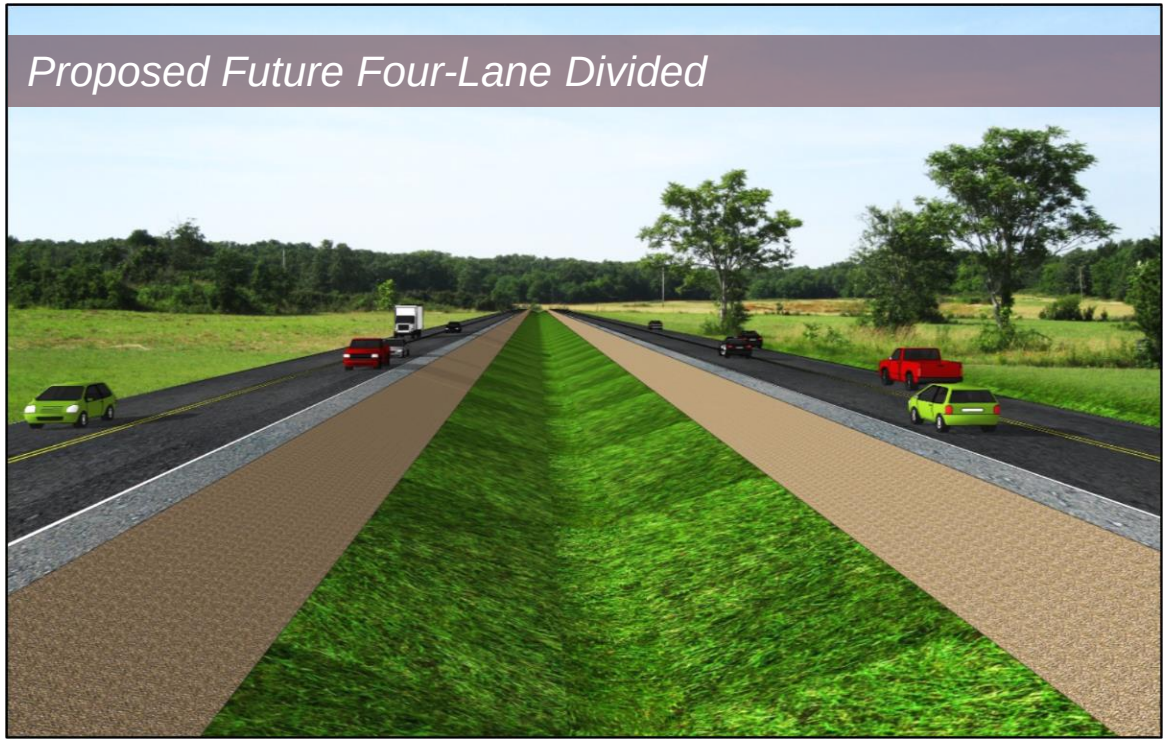
4-Lane Divided Alternative 1A & 7
Roadway Section

- **Design Speed – 65 mph**
- **Proposed Section**
  - Two 12-Foot Lanes
  - 4-Foot Inside Shoulders
  - 10-Foot Outside Shoulders
- **Divided Grass Median**
- **Left Turns at Median Openings**



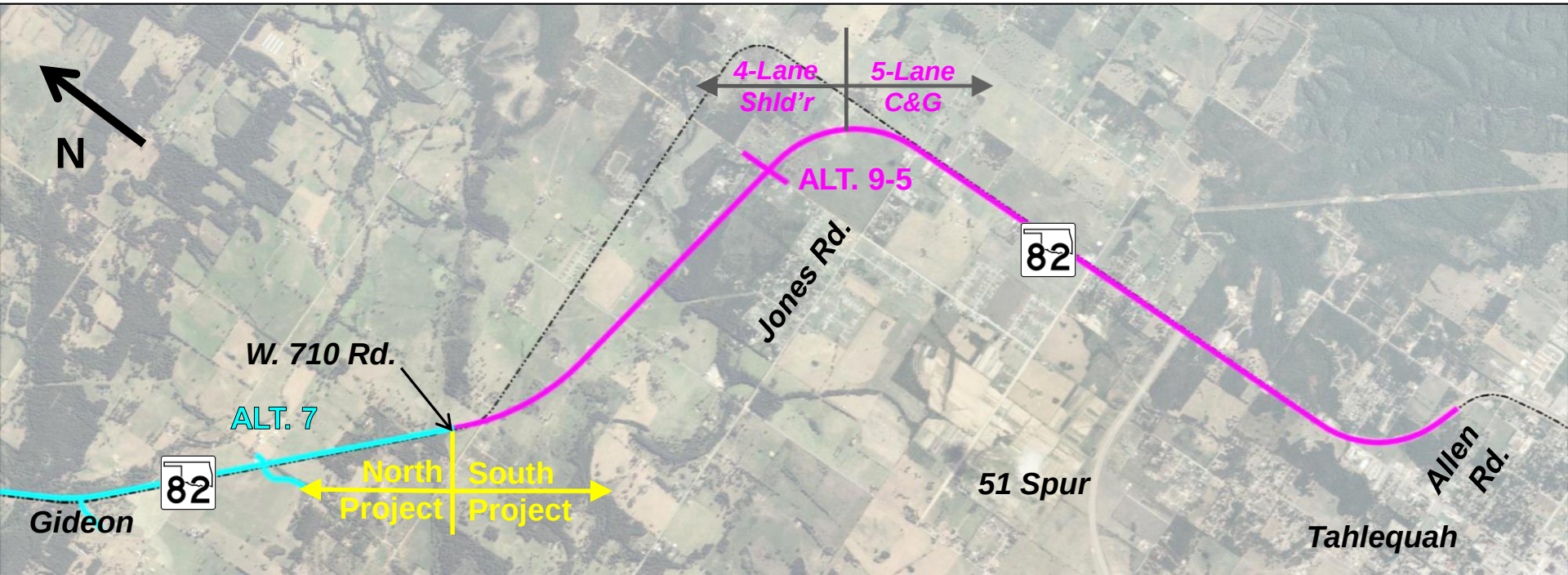
4-Lane Divided Alternative 1A & 7
Rendering

4-Lane Divided Alternative 1A & 7
Rendering



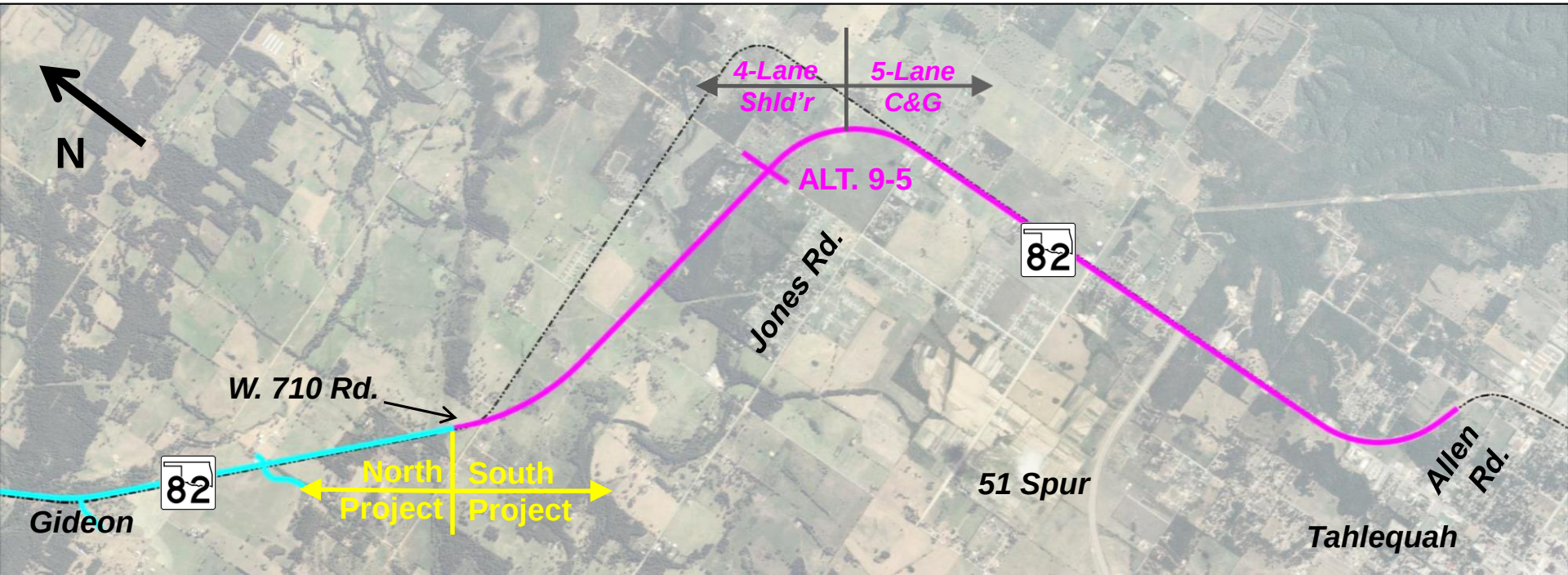
Combination Alternative 9-5 With 7
Roadway Sections

- **Design Speed – 55 mph**
- **Proposed Section**
  - Two 12-Foot Lanes
  - 14-Foot Center Turn Lane
  - 10-Foot Outside Shoulders
- **Curb & Gutter**

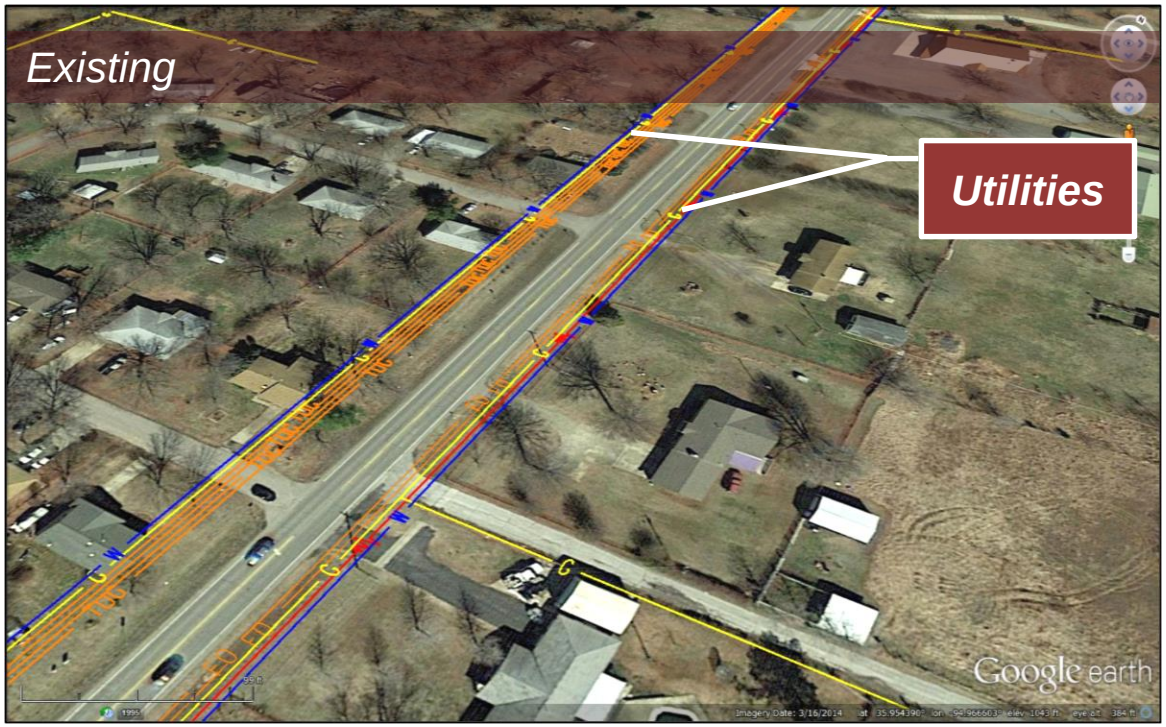


Combination Alternative 9-5 With 7
Roadway Sections

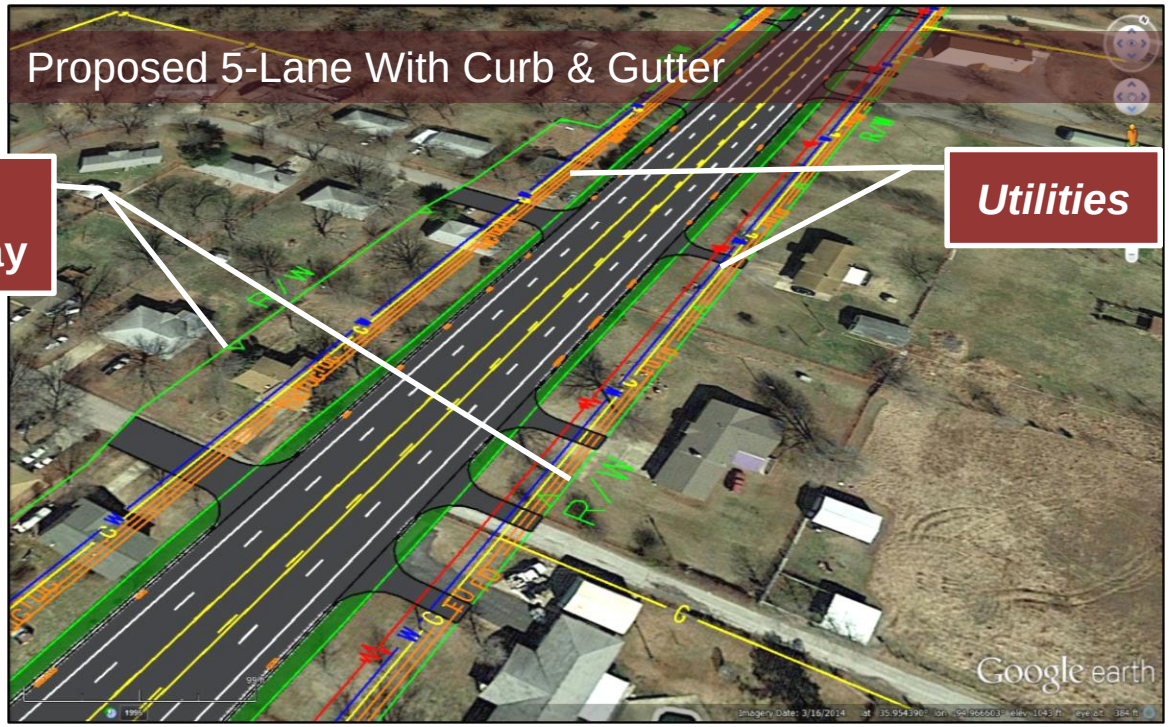
- **Design Speed – 65 mph**
- **Proposed Section**
  - Two 12-Foot Lanes
  - 4-Foot Inside Shoulders
  - 10-Foot Outside Shoulders
- **Divided Grass Median**
- **Left Turns at Medians**



5-Lane Alternative 9-5
Rendering



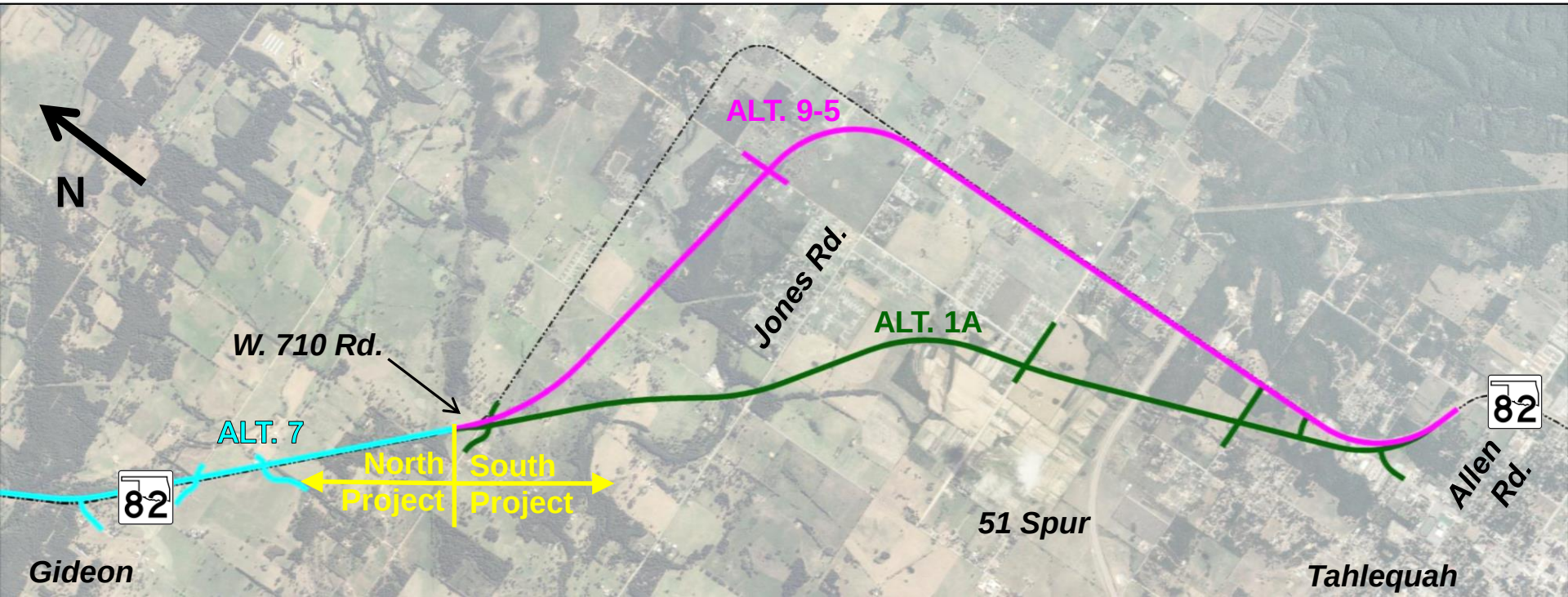
5-Lane Alternative 9-5
Rendering




COMPARISON OF
ALTERNATIVES

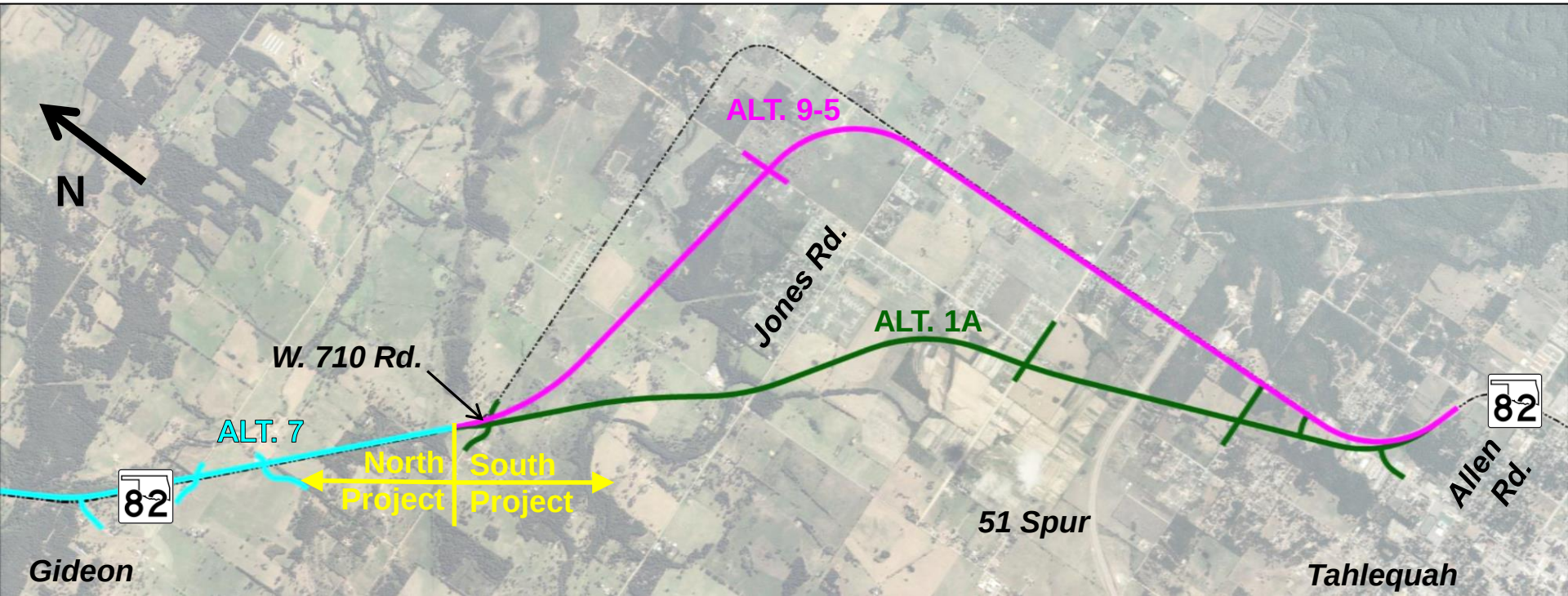
Comparison of Alternatives

- **All of the Alternatives Were Evaluated on the Following Factors:**
  - Does the Alternative Meets the Purpose and Need for the Project?
    - Does it Complete the Multi Lane Loop Around Tahlequah?
    - Does it Improve Safety Along SH-82?
    - Does it Provide the Needed Capacity for the Future?



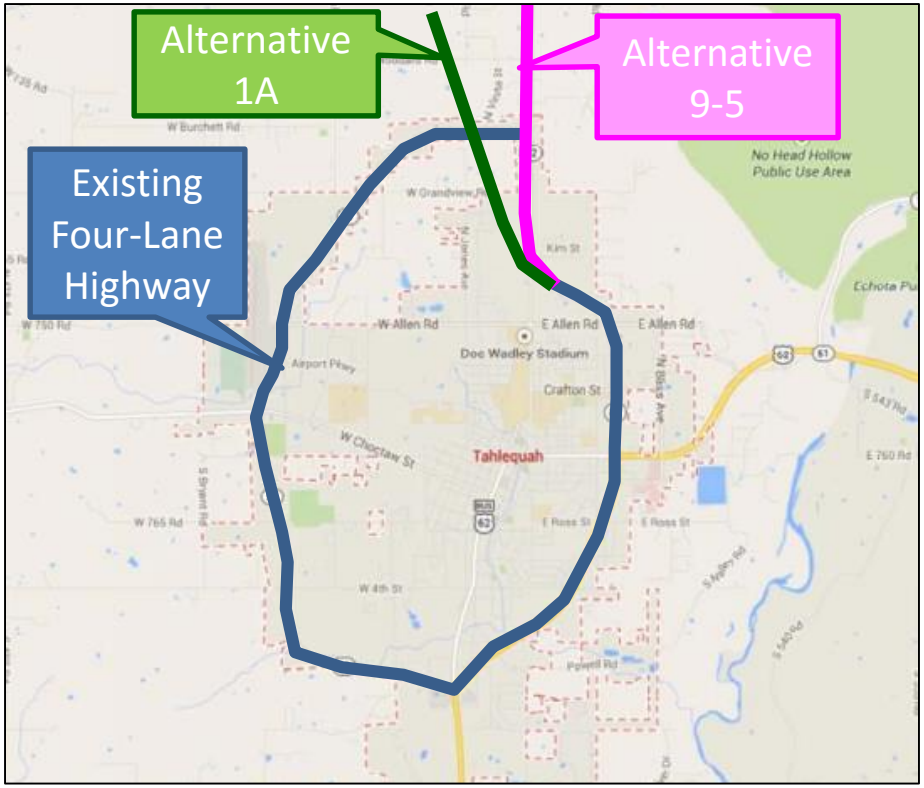
Comparison of Alternatives

- **All of the Alternatives Were Evaluated on the Following Factors:**
  - What Are the Impacts?
    - Relocations
    - Environmental
    - Utilities
  - What are the Costs?



Comparison of Alternatives
Multi-Lane Loop

- **Both of the South Project Alternatives Complete the Multi-Lane Loop Around Tahlequah to Ease Traffic Congestion**



Comparison of Alternatives
Traffic Operations

- **Level of Service**
  - Describes how Traffic Flows
  - Measured on a Scale From A-F
- **Below LOS D = Failure**
- **SH-82 Level of Service**
  - Today – LOS C/D
  - Future No Build – LOS D/E
  - Alternative 1A – LOS A
  - Alternative 7 – LOS A
  - Alternative 9-5 – LOS A/B

LOS A

LOS A describes operation at or above the posted speed limit, where vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.

LOS C

LOS C provides for flow with speeds at or near the posted speed limit. Freedom to maneuver within the traffic stream is noticeably restricted.

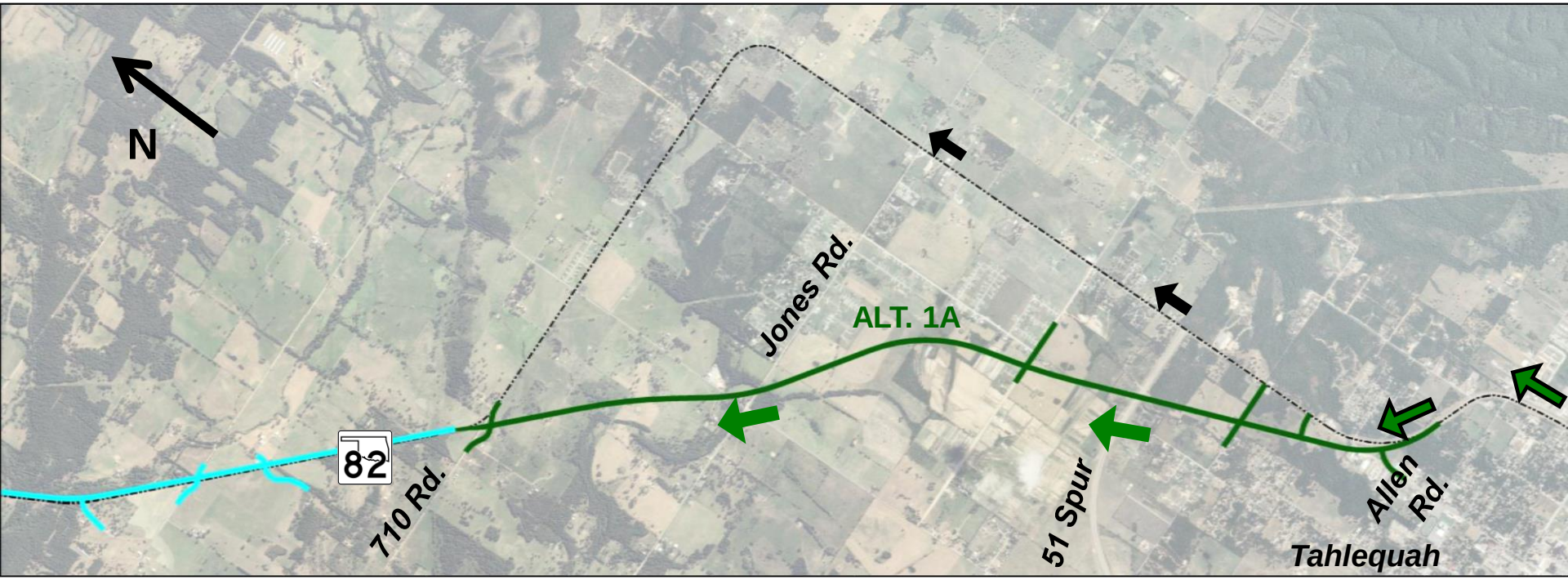
LOS E

LOS E describes operation at capacity. Vehicles are closely spaced, and maneuverability within the traffic stream is extremely limited. The level of physical and psychological comfort afforded the driver is poor.

GARVER

Comparison of Alternatives
Traffic Flow

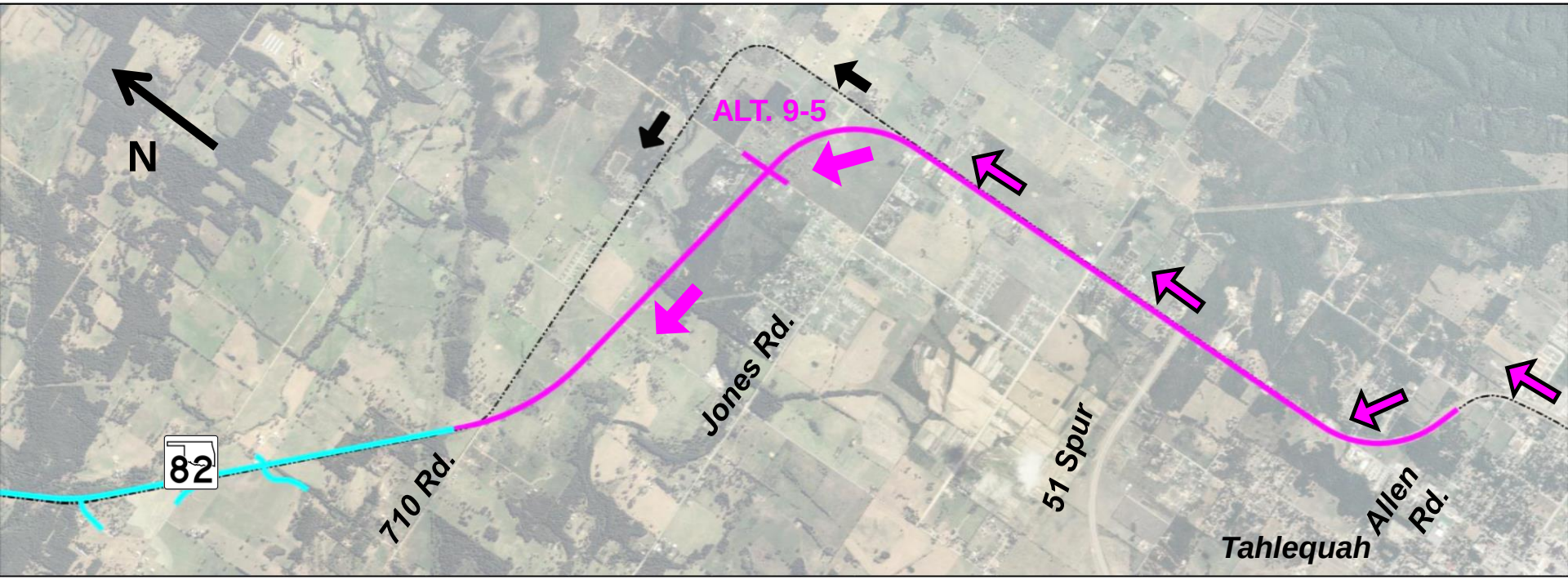
- **Traffic Flow**
  - Alternative 1A – Traffic is Split Between the Proposed and Existing Roadways
  - Reduces Conflicts Between Different Trip Types



GARVER

Comparison of Alternatives
Traffic Flow

- **Traffic Flow**
  - Alternative 9-5 – Most of the Traffic Remains in Existing Corridor
  - Local and Through Trips Will Use the Same Roadway



GARVER

Comparison of Alternatives
Safety

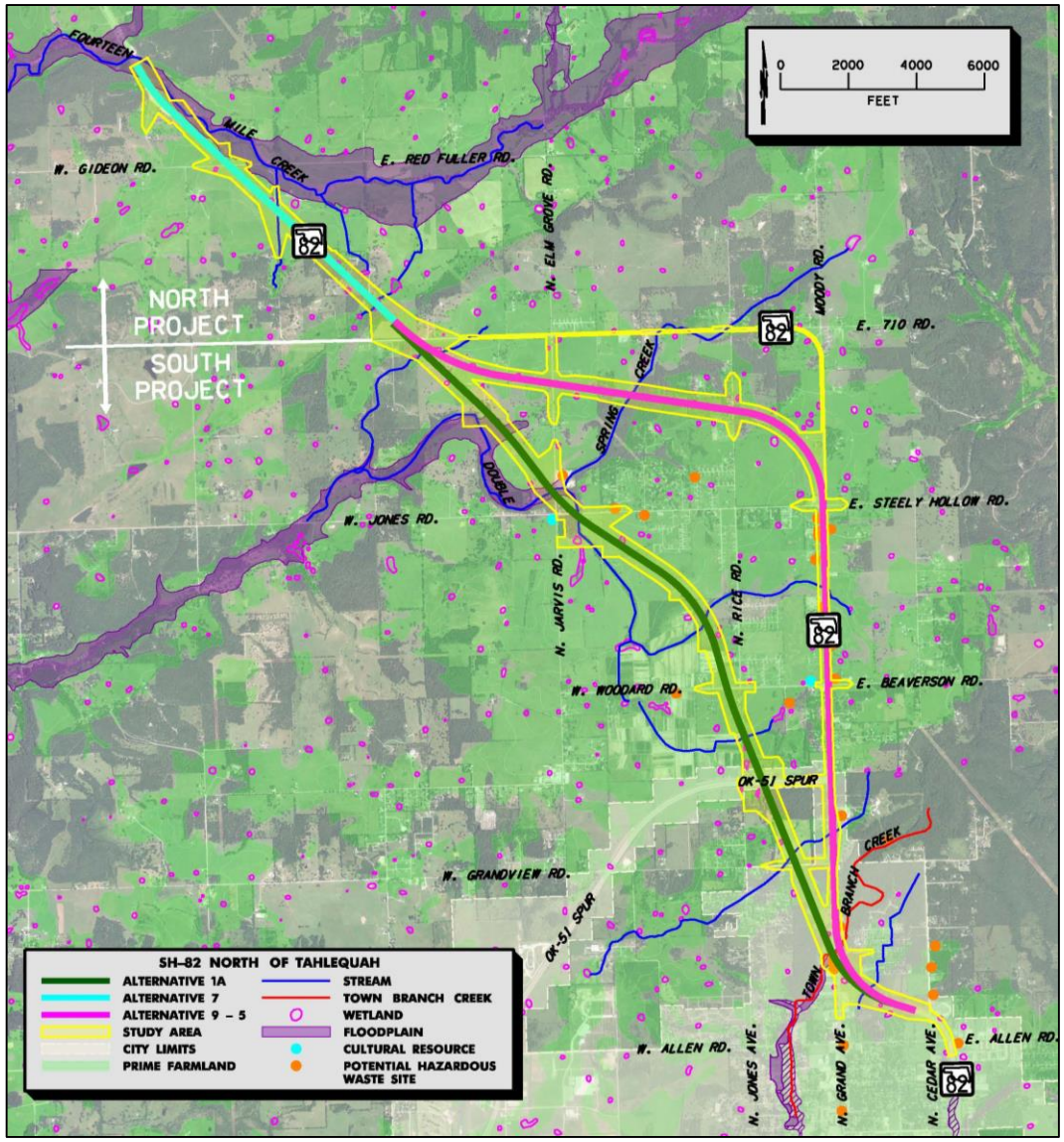
- **All Alternatives Are Expected to Improve Safety**
- **To Compare the Safety of a 4-Lane vs. a 5-Lane Roadway, we Studied Collisions on US 62 South of Tahlequah (Cherokee County)**
  - Compared Two Adjacent Segments of US 62 (2004-2014)
  - Similar to SH-82 in Traffic Volumes, Speed, Number of Driveways
- **4-Lane Divided – 3.90 Miles, 52 Collisions (0 Fatalities)**
- **5-Lane With Center Turn Lane – 4.40 Miles, 93 Collisions (8 Fatalities)**

4-Lane With Grass Median

5-Lane With Curb & Gutter

Comparison of Alternatives
Impacts

- The Environmental Assessment Compares the Impacts of the Alternatives on the Human and Natural Environments
- These are Preliminary Impacts Only Based on Reconnaissance Level Data
- ODOT Will Complete Detailed Studies on the Selected Alternative
- Avoidance and Minimization of Impacts Will be a Priority During Design



Alternatives Summary

ALT.	PURPOSE			COSTS	PROPERTY IMPACTS			BUSINESS AND EMPLOYMENT IMPACTS		
	Traffic	Safety	Multi-Lane Loop	Total Cost	Residential Relocation	Farm Properties Divided	Church Relocation	Business Relocation	Businesses With Negative Sales Impacts	Businesses With Positive Sales Impacts
South Project										
1A	LOS A	More Improved	Yes	$47.7	5	7	0	5	10	3
9-5	LOS A/B	Improved	Yes	$45.7	16	2	1	3*	0	8
North Project										
7	LOS A	More Improved	N/A	$17.5	1	0	0	0	0	0

** Includes one Vacant Commercial Property*

Low Impact Moderate Impact Higher Impact

GARVER

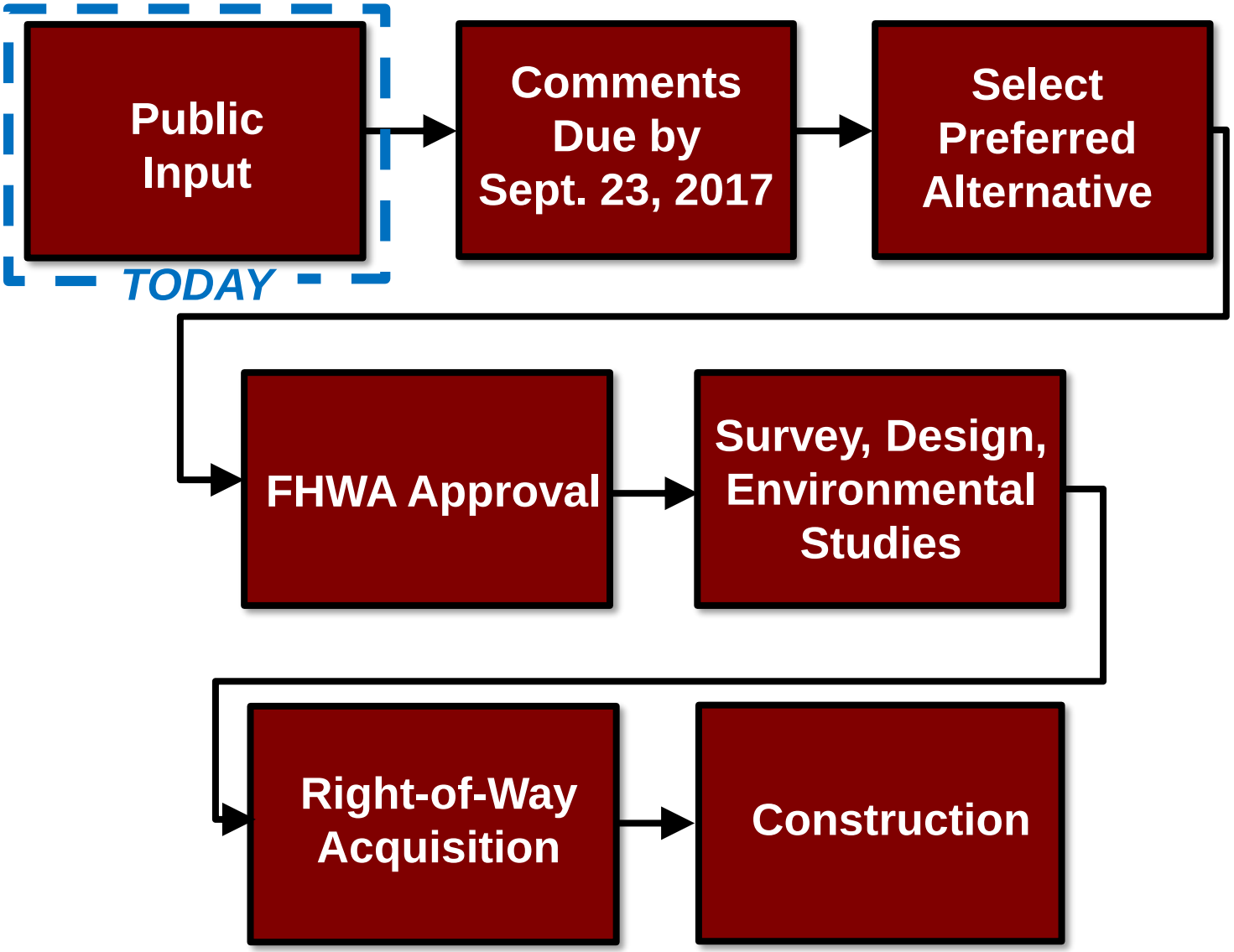
Alternatives Summary

ALT.	ENVIRONMENTAL IMPACTS					
	Known Cultural Resources Sites	Wetlands (Acre)	Potential Hazardous Materials Sites	Potential Noise Impacts (Homes)	Construction Impacts (Temporary)	Low-Income and Minority Populations
South Project						
1A	0	3.2	3	52	Lower	Impacts Equal for all Populations
9-5	0	2.5	5	13	Higher	Impacts Equal for all Populations
North Project						
7	0	0.1	0	0	Lower	Impacts Equal for all Populations

Low Impact Moderate Impact Higher Impact

GARVER

Next Steps



GARVER

Verbal Comments

- ✓ **State your Comments for the Court Reporter**
  - Speak Into the Microphone
  - State Your Full Name and Mailing Address
  - Comments are Limited to 3 Minutes
  - All Comments Will be Recorded by the Court Reporter
  - ODOT Will Not Answer Questions During the Comment Portion of the Hearing

- ✓ **You May Also Give your Comments to the Court Reporter Privately After the Open Comment Session**

GARVER

Written Comments

- ✓ **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**
- ✓ **The EA and Supporting Documents are Available at www.odot.org\publicmeetings**

Deadline for Comments:

September 23, 2017

GARVER