US 81 Bypass of Chickasha Environmental Assessment

Public Meeting

March 14, 2013

US 81 Bypass Environmental Assessment

Introductions

- ODOT
- FHWA
- SAIC

US 81 Bypass Environmental Assessment

Meeting Purpose

- Present need for bypass
- Provide responses to 10/04/11 public meeting comments
- Present socioeconomic study results
- Introduce 3 alignments developed in response to public comments
- Obtain input and feedback

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Purpose and Need

- Provide Improved Route for North/South US 81 Travel through Chickasha
  - Reduce Travel Time and Delays for Traffic Traveling through Chickasha
  - Reduce Congestion along US 81 through Chickasha Central Business District
  - Improve Safety for Motorists and Pedestrians along Existing US 81 through Chickasha

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Traffic Data & Analysis Highlights

- Video of Existing Truck Traffic & Critical Turning Maneuvers
- Traffic Data & Level of Service
- Crash Data & Safety Analysis

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Purpose and Need

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Traffic Data & Analysis Highlights

- Video of Existing Truck Traffic & Critical Turning Maneuvers
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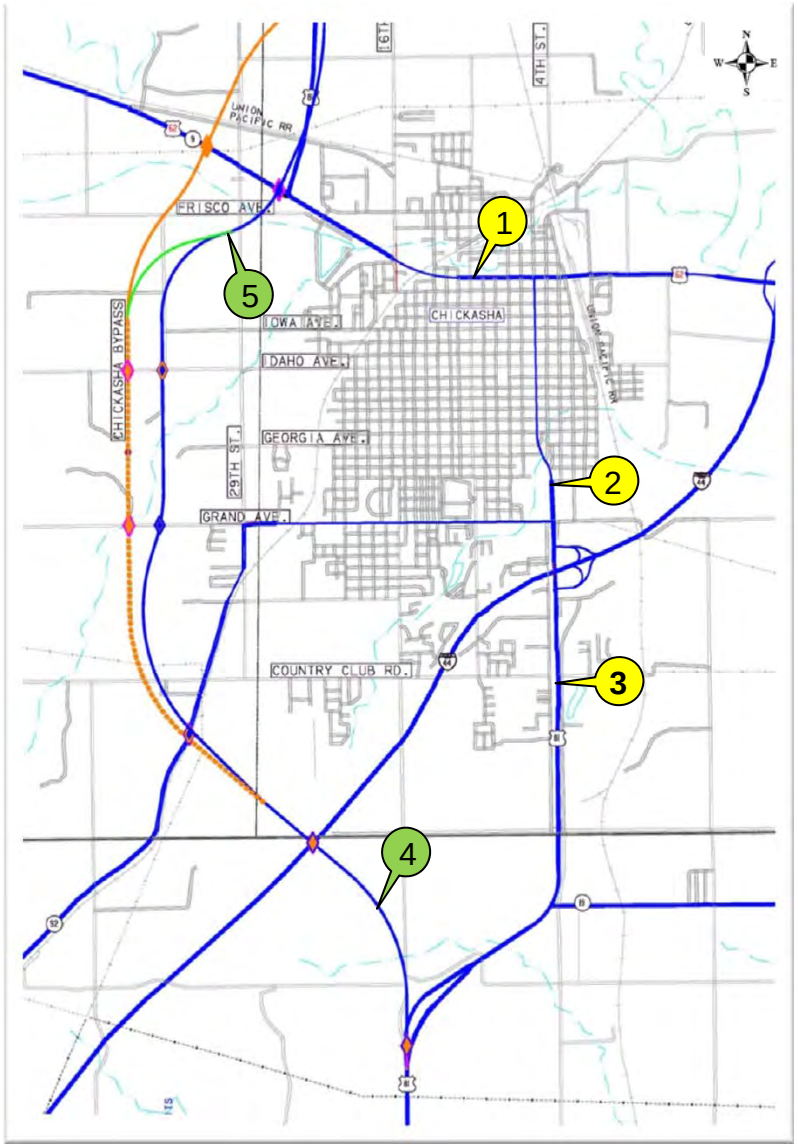
Daily Traffic Along US 81 - Without/With Bypass (2012,2040)



Annual Average Daily Traffic

Location	**2012 w/o Bypass**	2012 w/ Bypass	**2040 w/o Bypass**	2040 w/ Bypass
1	**11,280**	8,770	**17,600**	13,700
2	**14,900**	11,410	**23,300**	17,800
3	**17,680**	14,080	**27,580**	21,950
4	**n/a**	5,360	**n/a**	8,400
5	**n/a**	4,430	**n/a**	6,920

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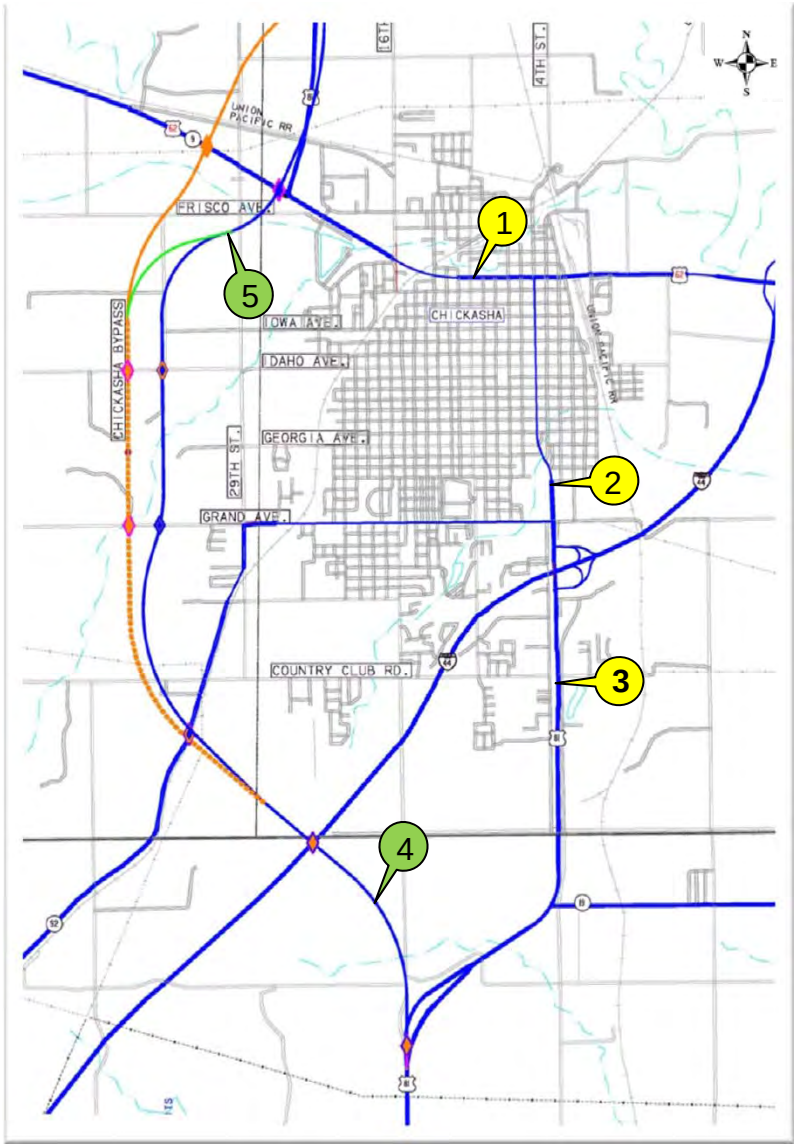
Trucks Along US 81 - Without/With Bypass (2012, 2040)



Daily Truck Traffic				
Location	**2012 w/o Bypass**	2012 w/ Bypass	**2040 w/o Bypass**	2040 w/ Bypass
1	**1,900**	1,200	**3,000**	1,900
2	**2,000**	1,100	**3,120**	1,720
3	**2,600**	1,670	**4,060**	2,600
4	**n/a**	1,230	**n/a**	1,920
5	**n/a**	1,020	**n/a**	1,600

Excessive truck traffic through Downtown Chickasha

- Affects Traffic Operations & Safety
- Restricts Sight Distance

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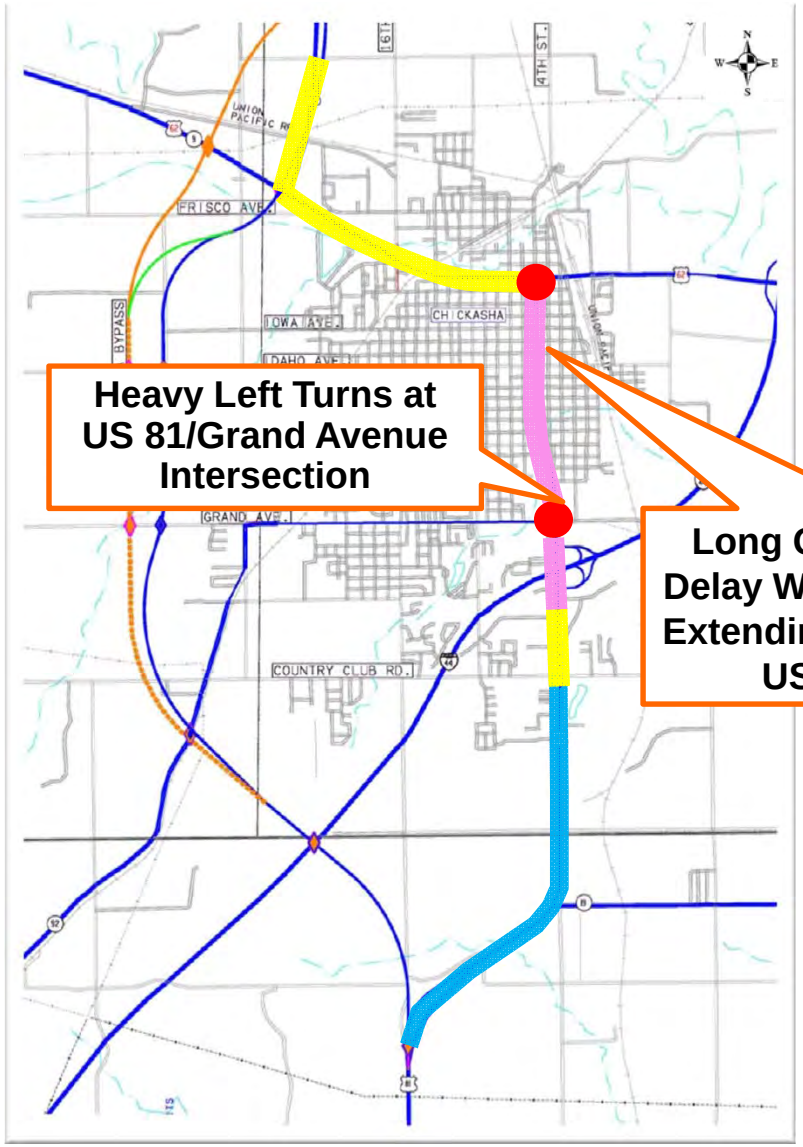
Future Level of Service (LOS) Along US 81 – Without Bypass (2040)

2040 Without Bypass



Heavy Left Turns at US 81/Grand Avenue Intersection

Long Queues & Excessive Delay Will Occur Along US 81 Extending South From US 81/ US 62 Intersection

LOS Legend:

- **B**
- **C**
- **D**
- **E**
- **F**

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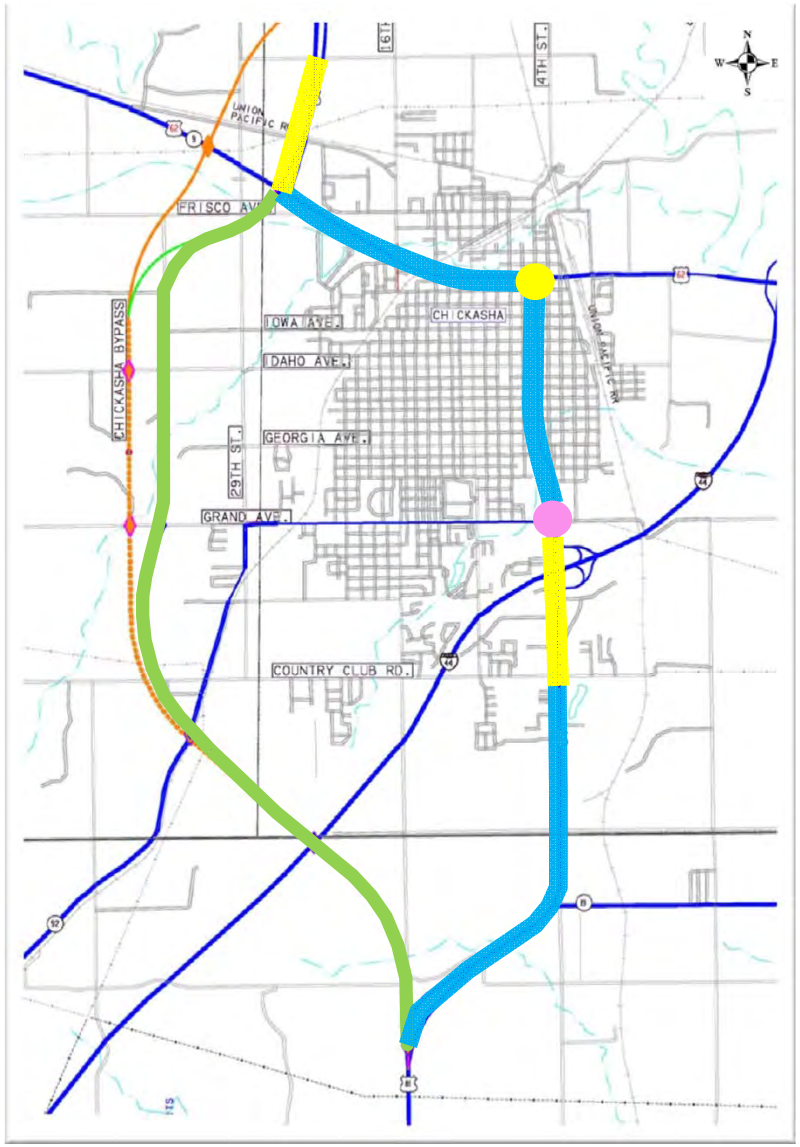
Future Level of Service (LOS) Along US 81 – With Bypass (2040)

2040 With Bypass



LOS Legend:

- **B**
- **C**
- **D**
- **E**
- **F**

Improved Traffic Flow & Operations

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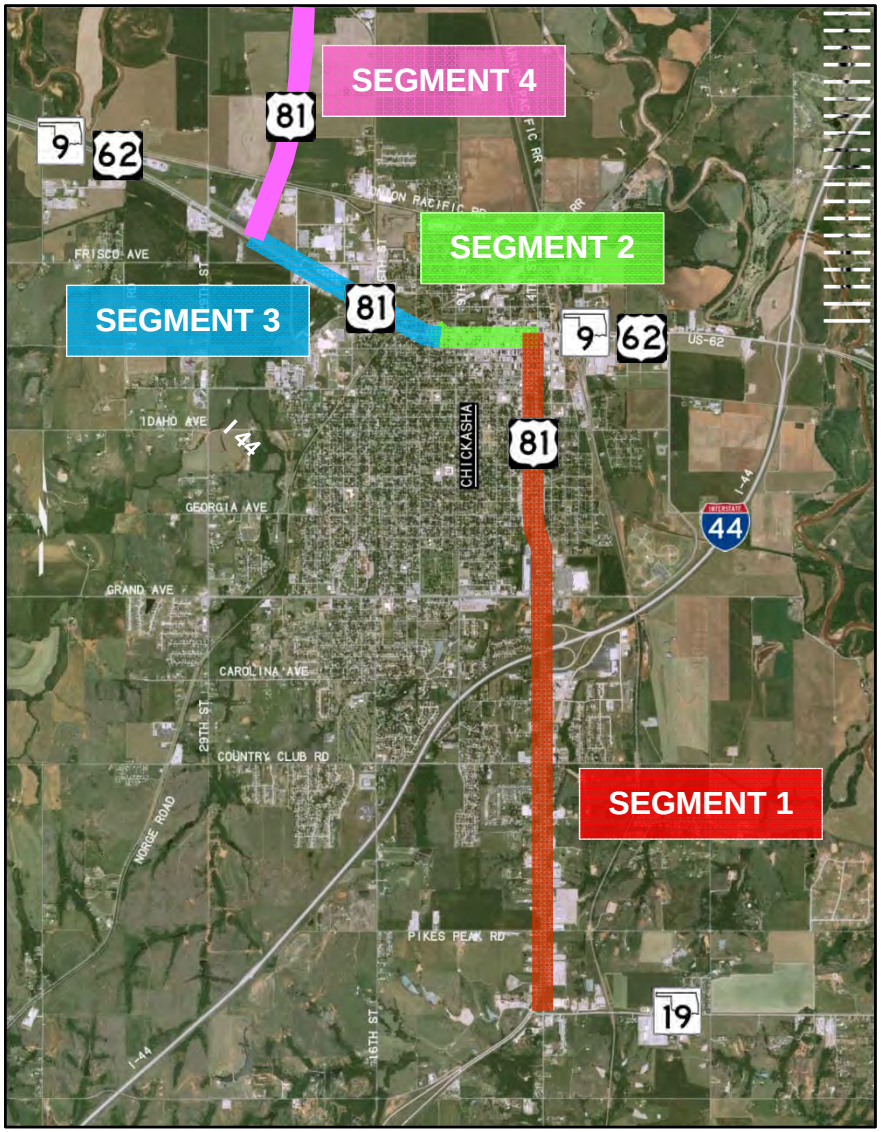
Five-Year Crash Data Along Existing US 81 (Years 2007 – 2011)

Total Crashes = 738
Injury Crashes = 218
Fatalities = 4



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Five-Year Crash Data Along Existing US 81 (Years 2007 – 2011)

Five-Year Crash Data (2007 – 2011)			
Crash Type	**Number of Crashes**	**Crash Rate Along US 81** *(per 100 million vehicle miles)*	**Statewide Average Crash Rate for Similar Facility** *(per 100 million vehicle miles)*
Segment 1 - US 81 from SH 19, north to US 62			
Fatality	2	2.2	1.18
Injury	175	190.7	53.34
Total	603	657.2	153.9
Segment 2 – US 62 from US 81, west to 11th Street			
Fatality	1	11.1	1.03
Injury	25	277.0	124.21
Total	91	1008.1	377.75
Segment 3 – US 62 from 11th Street, west to US 81 North			
Fatality	1	7.3	1.18
Injury	11	80.1	53.34
Total	34	247.6	153.9
Segment 4 – US 81 north 1.5 miles from US 62			
Fatality	0	0.0	1.57
Injury	7	63.4	56.01
Total	10	90.6	178.52

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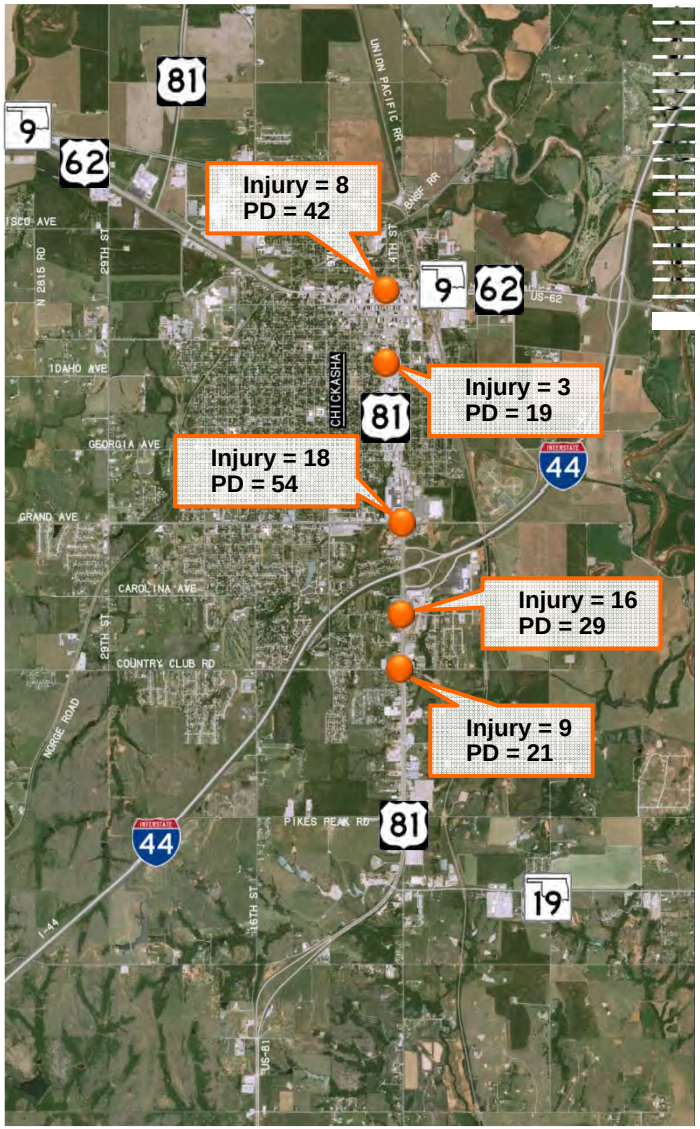
Five-Year Crash Data Along Existing US 81 (Years 2007 – 2011)

High Crash Intersections with Injury and Property Damage



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Travel Time

From	To	Travel Time Data	
Northern Terminus: North of the US 81/ US 62 intersection	***Southern Terminus:*** South of the US 81/ SH 19 East intersection	***Free Flow Speed Conditions along Existing US 81***	**10 minutes**
		2012 "No-Build" Peak Conditions	**15 – 25 minutes [1]**
		2040 "No-Build" Peak Conditions	**30 – 45 minutes [1]**
		2040 "Build" Peak Conditions along the Bypass	**8 – 10 minutes**
		2040 "Build" Peak Conditions along Existing US 81	**15 – 20 minutes**

1. Travel time subject to increase when over length and/or over width trucks are present

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Improvement of Existing US 81

Improvement of Existing US 81 to LOS C

- Widen to 6-Lane and Continuous Left-Turn Lane:
  US 81/US 62 (Choctaw) to Minnesota; 5 Blocks
- Widen to 8-Lane and Continuous Left-Turn Lane:
  Minnesota to Grand; 16 Blocks
- Significant Right-of-Way Acquisition Required
- Impacts:
  - Loss of Buildings, Businesses, and Parking throughout Corridor
  - Loss of All Structures Adjacent to US 81, Choctaw to Kansas
  - Downtown Historic District and Structures

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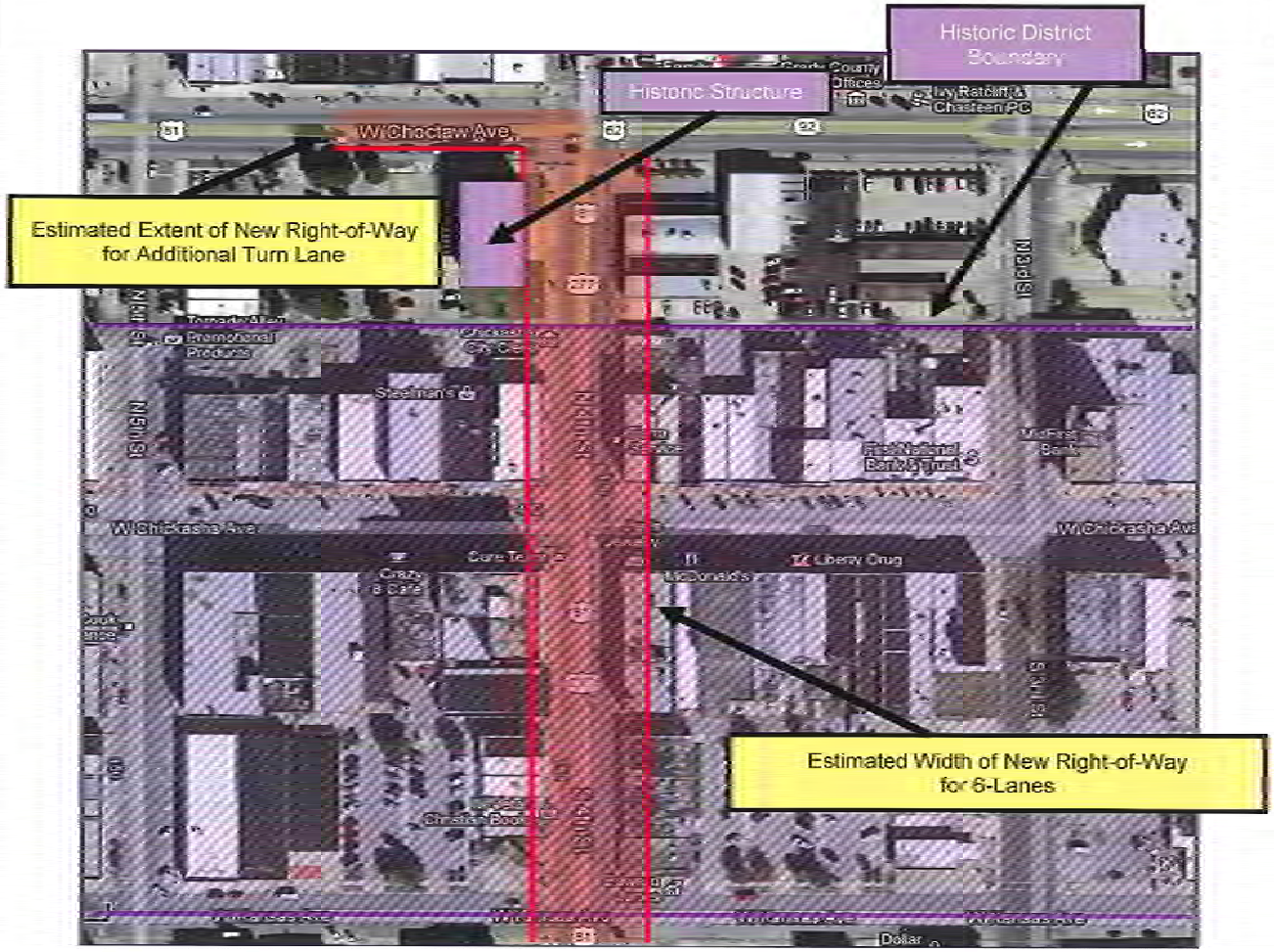
Improvement of Existing US 81

Improvement of Existing US 81 – Likely Not Feasible

- Funding likely unavailable due to impacts to historic resources
- Extensive right-of-way impacts



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Proposed Project

- Controlled-Access 4-Lane Divided Western Bypass of Chickasha
- From Curve North of the US 81/SH 19 West Junction North to US 81/US 62

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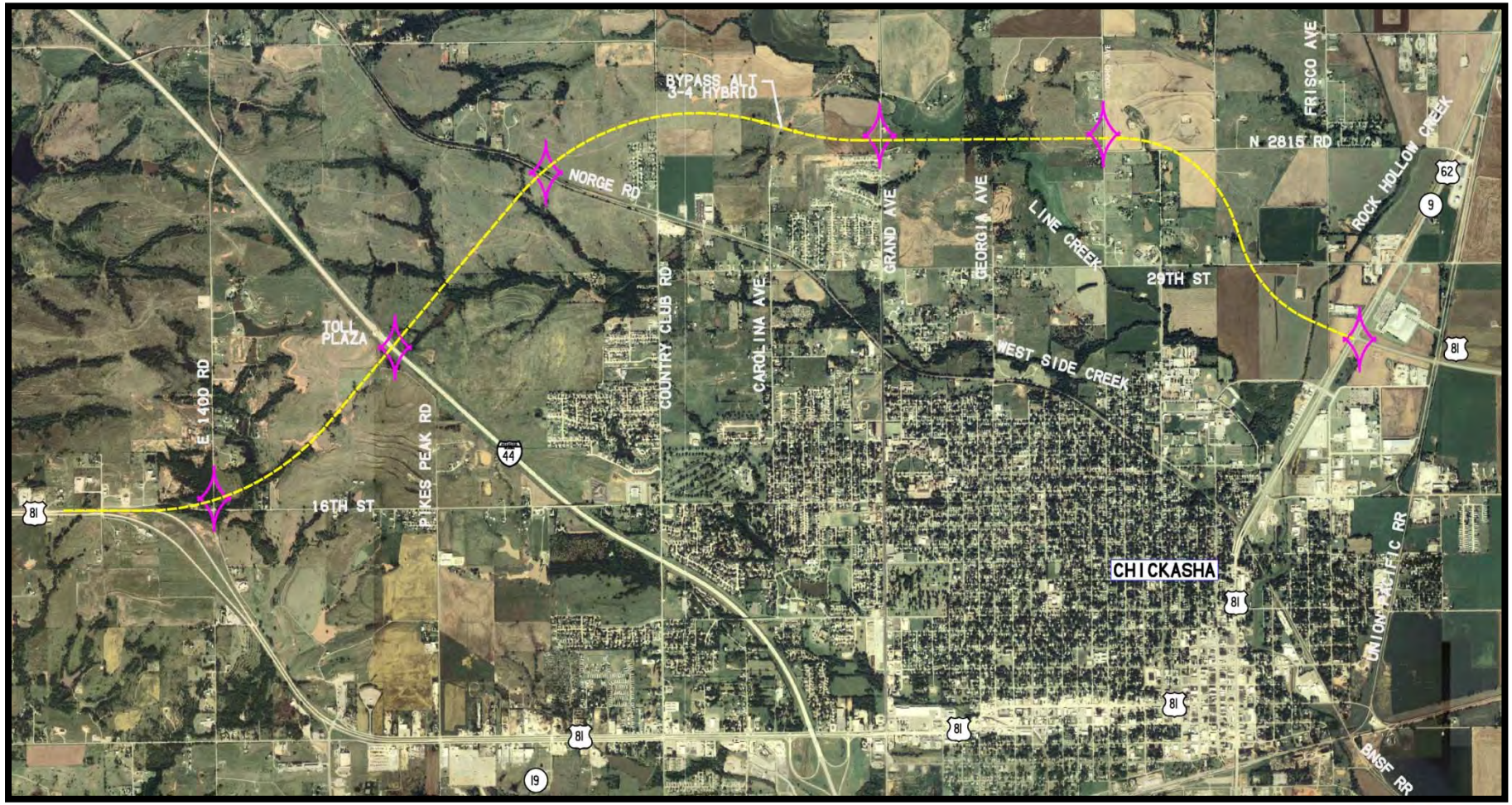
Alignment Presented at October 2011 Meeting
(from 2007 Corridor Study)



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Public Comments from First Meeting

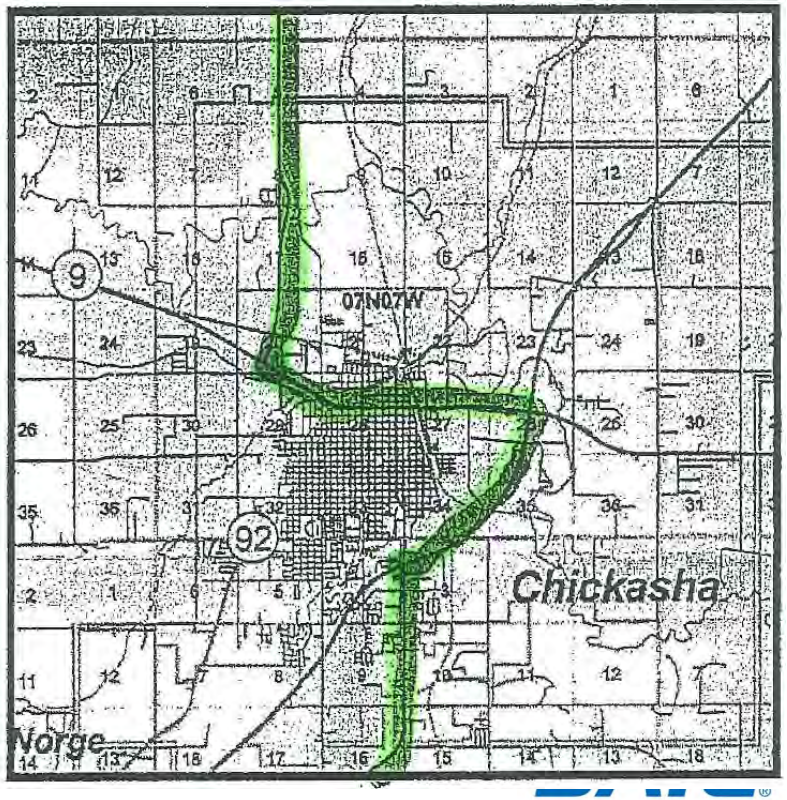
Public Comments from First Meeting:

- Suggested I-44 as US 81 truck bypass route
- Concerns regarding proximity to:
  - Large church
  - Residential neighborhood
- Concerns over socioeconomic impacts

Public Comments: I-44 as US 81 Truck Bypass Route

Good Idea, but Some Significant Complications:

- Would require payment of H. E. Bailey Turnpike toll
- Turnpike toll gate restrictions
  - 15’ 3” – maximum height
  - 9’ 6” – maximum cash width
  - 11’ 6” – maximum pikepass width
  - 80,000 lbs – maximum weight



Public Comments: I-44 as US 81 Truck Bypass Route

- Cannot require all truck traffic to use I-44, as some truck traffic has local destination in Chickasha
- Longer route than going through town
- National Highway System routes need to provide access to truck traffic
- Based upon ODOT's understanding of state statutes, no authority to restrict truck traffic

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Public Comments: I-44 as US 81 Truck Bypass Route

- Remove state highway designation from downtown route
- Dual designation for I-44/US 81
- Approximate cost of improvements = $184M
- Limited options for capacity expansions beyond year 2040
- Will not relieve congestion along US 62 west of US 81 (Choctaw)
- Increase congestion on US 62 east of US 81
- Conclusion: Not the most feasible alignment

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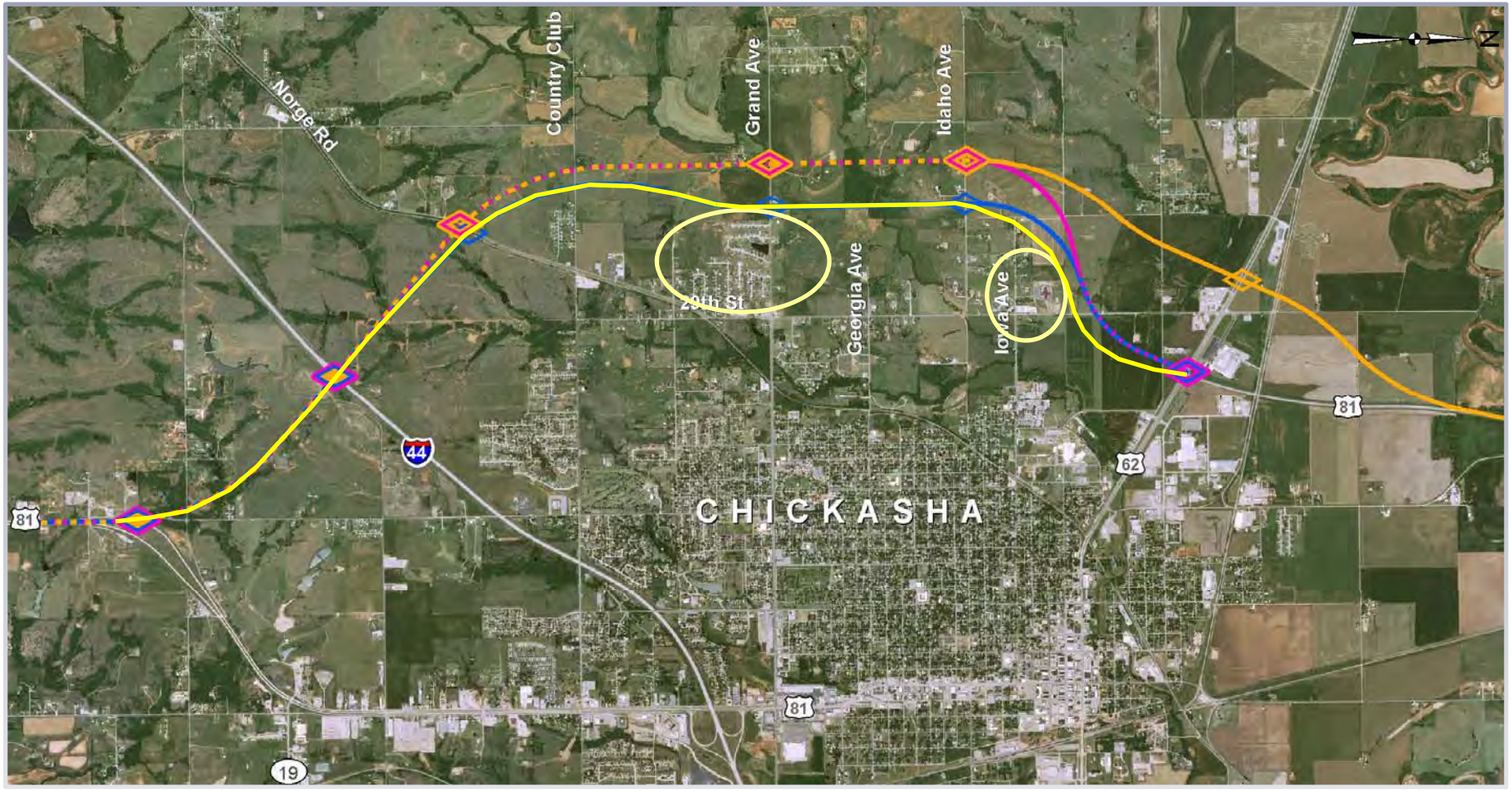
Public Comments: Proximity to Church and Neighborhood



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Public Comments from First Meeting

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Public Comment: Concerns over Socioeconomic Impacts

- Concerns over Socioeconomic Impacts
  - Andy Atlas, AICP
  - Vice-President, CP&Y Inc.

Purpose of the Study

- To describe the social and economic conditions of the existing US 81 corridor and evaluate the socioeconomic impacts of a proposed bypass on the existing corridor

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Aerial of the Study Area

Industrial Facilities

Historic District, Downtown

Existing Business District
(along S. 4th St / US 81)

I-44 Interchange

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Socioeconomic Assessment

Study Methodology

- Literature Review
- Data Analysis
  - U.S. Census
  - American Community Survey
  - Floodplain Map
  - Traffic Data
- Interviews with local residents
- Field Investigations
- Review of previous public involvement documentation

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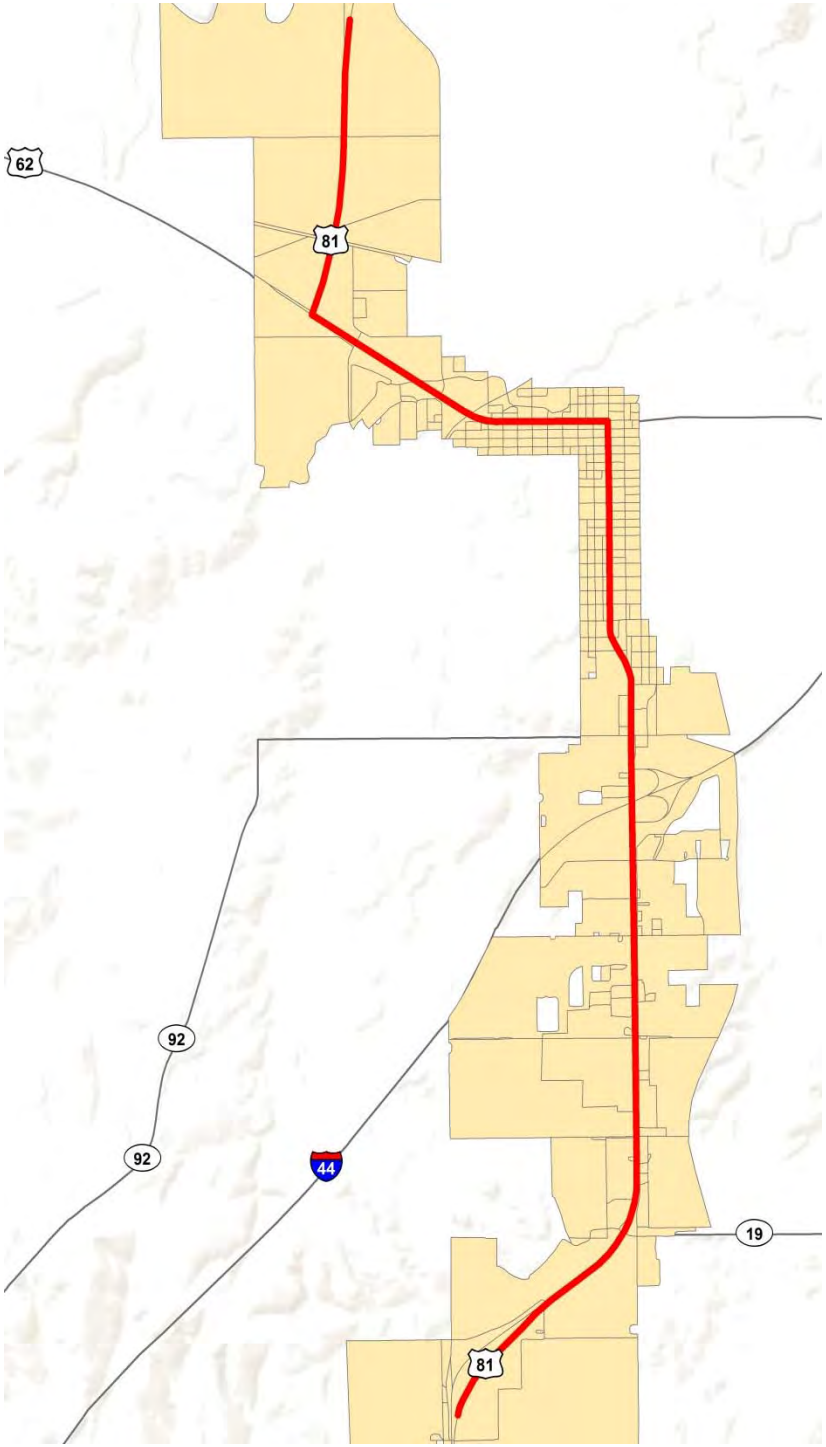
Existing Conditions / Environmental Consequences

Land Use

- 290 businesses on existing corridor
- 16 percent vacancy rate
- 23 percent of businesses provide travel-related services
  - Automotive
  - Dining
  - Accommodation
  - Convenience stores

Demographic Study Area

Census blocks within 500 feet of the existing US 81 corridor



Population and Demographic Characteristics

- Study Area population declined between by 4.9 percent between 2000 and 2010
- Chickasha's population is expected to grow to approximately 19,260 residents by 2030
- The ethnicity in the study area and the City is predominantly White (non-Hispanic)

Population Change 2000-2010

Year	State of Oklahoma	Grady County	City of Chickasha	Study Area*
Percent Change 2000-2010	8.7%	15.2%	1.2%	-4.9%
2010	3,751,351	52,431	16,036	2,737

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Existing Conditions / Environmental Consequences

Transportation Systems and Mobility Patterns

- Truck traffic on existing US 81 would be reduced from under the Build scenario compared to the No-Build scenario
- Four traffic fatalities in corridor from 2007 – 2011, including one pedestrian
- Traffic projections show that 2040 traffic on existing US 81 between US 62 and I-44 would exceed 2012 traffic by between 19 and 24 percent
- Overall traffic on US 81 (bypass and existing combined) would be more than 1,000 vehicles per day higher than No Build

Economic Conditions

- Annual average unemployment of 5.8 percent in Grady County was lower than the statewide rate of 6.2 percent in 2011
- Primary employment industries in Chickasha are: social services, manufacturing, and retail trade
- Almost half of Grady County labor force (48.5 percent) commutes outside of Grady County
- Chickasha poverty rate of 21.6 percent is higher than County and State
- Sales tax revenues grew by two percent from 2009 to 2012 to $862,000

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Conclusions

Competing Goals:

- General economic revitalization of the community
- Maintaining vitality of individual businesses

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Conclusions

Potential **costs** to the community of a bypass

- Potential closure of some travel-related businesses
- Cost will tend to be short-term as travel increases on existing US 81

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Conclusions

Potential **opportunities** to the community of a bypass

- Increased traffic and business through Chickasha
- Revitalization of existing US 81 corridor
- Improved Safety
- Trucks will be able to move through town more quickly
- Economic development opportunities along bypass route at interchanges

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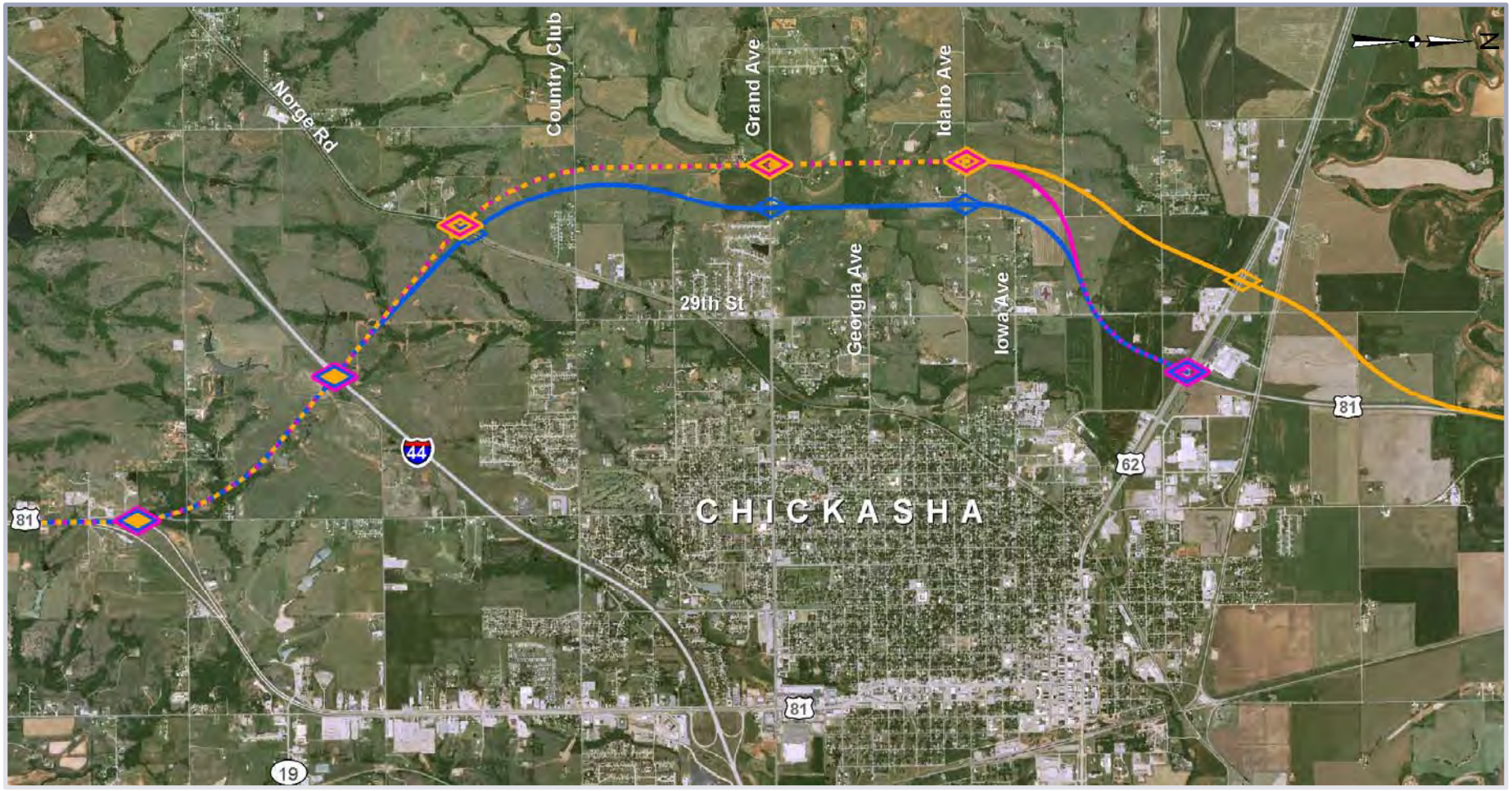
Bypass Alignments under Consideration



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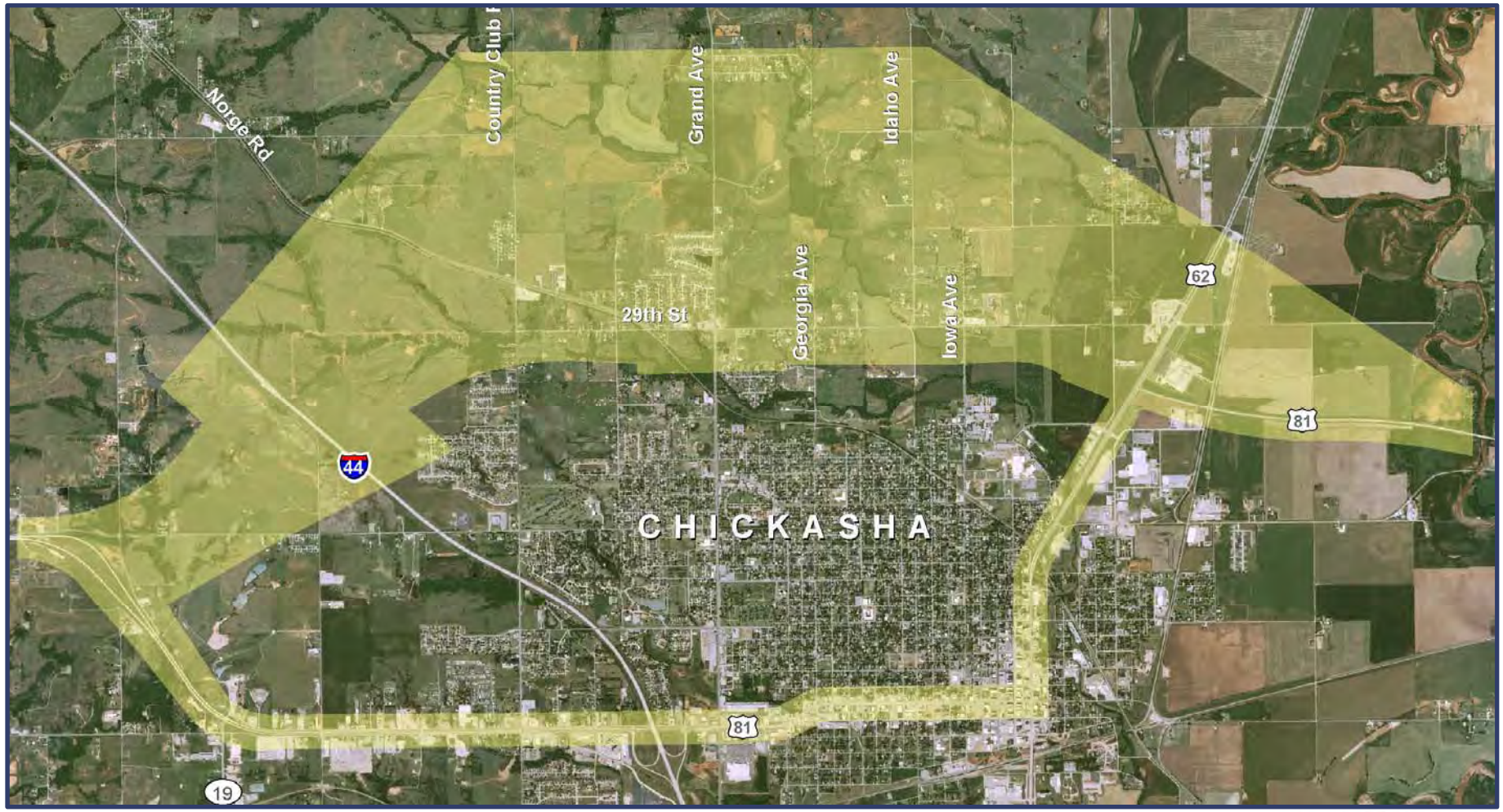
Updated Environmental Assessment Study Area



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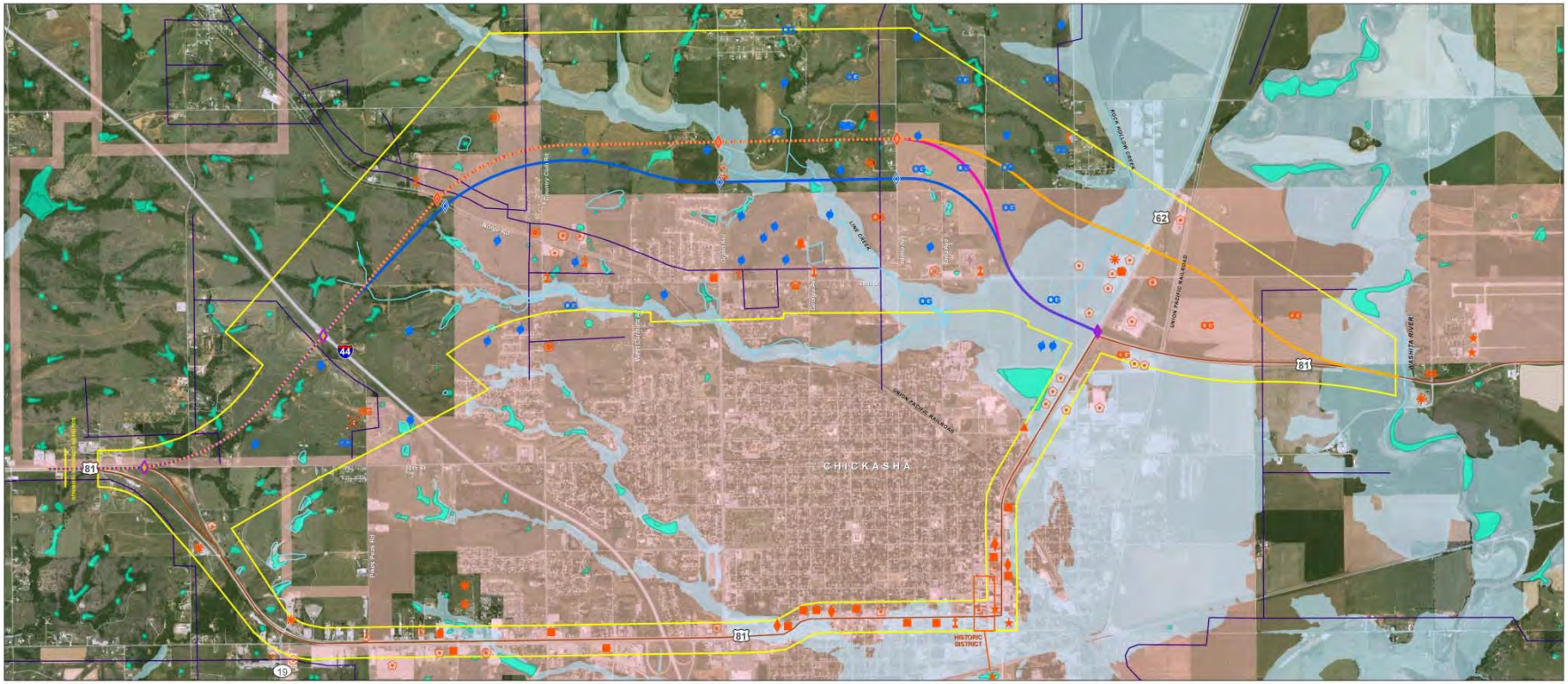

MAP KEY

- Alignment 1
- Alignment 2
- Alignment 3
- Existing Alignment
- Potential Wetlands or Waterway
- Rural Water Systems Pipeline (From OWRB Dataset)
- Proposed Interchange Locations
- NWI Wetland
- 100-Year Flood Zone
- Environmental Study Area Perimeter
- Chickasha City Limits
- Pipeline Crossing
- OG API Listed Active Wells
- API Listed Plugged and Abandoned Wells (location approximate; based on centroid of legal description)
- Communications Tower
- School Facility
- Cemetery
- Park
- Church
- Underground Storage Tank (UST)
- Former Gas Station
- Rest Home
- Salvage Yard
- Industrial Activity and Chemical Storage
- Automotive Maintenance
- Highway Maintenance Barn
- Electrical Substation
- OG Oil and Gas Production Observed in Field; no corresponding API listing
- Water Well or Tower
- National Register of Historic Places
- SS Sewer Lift Station

N

0 0.2 0.4 0.6 0.8 Mile

2010 NAIP Aerial Photograph

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SAIC Energy, Environment & Infrastructure, LLC

3700 W. Robinson, Suite 200
Norman, OK 73072
(405) 321-3885
www.saic.com/Engineering

FIGURE TITLE
US 81 ENVIRONMENTAL CONSTRAINTS MAP

DOCUMENT TITLE
US 81 ENVIRONMENTAL ASSESSMENT

CLIENT
OKLAHOMA DEPARTMENT OF TRANSPORTATION

LOCATION
CHICKASHA, OKLAHOMA

DATE	11/29/2012
SCALE	AS SHOWN
DESIGNED BY	DA
APPROVED BY	DA
DRAWN BY	TS
PROJECT NUMBER	**4051003201**
FIGURE NUMBER	

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Comparison of Bypass Alignments

Alternative	100-Year Floodplains (linear feet)	NWI Wetlands (linear feet)	Prime Farmlands (acres)	Potential Noise Impacts	Potential for Hazardous Waste Impacts	Local Access	Estimated # of Relocations	Level of Service	Estimated Construction Cost ($M)
No-Build	0	0	0	NA	None	No Change	0	D*	0
Alignment 1	6,000	250	51	8	None	Best nearest to town (US-62, Idaho Avenue, Grand Avenue, Norge Road, I-44)	2 Commercial 7 Residential	B	154.3
Alignment 2	4,300	80	87	12	Slight Potential from O&G sites	Good further west than #1 (US-62, Idaho Avenue, Grand Avenue, Norge Road, I-44)	1 Commercial 5 Residential	B	168.9
Alignment 3	5,300	80	130	12	Slight Potential from O&G and industrial sites	Fair further west than #1 and #2 (US-62, Idaho Avenue, Grand Avenue, Norge Road, I-44)	2 Commercial 6 Residential	B	205.8

*: Level of Service along existing US 81 improves to “C” upon construction of bypass.

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What Happens Next?

- Consider Comments from this Public Meeting
- Select a Preferred Alignment
- Conduct Field Studies
- Prepare Draft EA Document
- Public Hearing (Mid-2014); Comment Period
- Finalize EA
- Request FONSI from FHWA (Late 2014)

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What Happens Next?

- Begin ROW Acquisition and Utility Relocation Process (2014)
- Begin Bypass Construction, as Funding Allows

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Information Sources

- Web Address: http://www.odot.org/meetings/other.php
- Greg Worrell – ODOT
  Phone: 405.522.8014
  200 NE 21st Street
  Oklahoma City, OK 73105
  E-mail: gworrell@ODOT.org
- Diane Abernathy – SAIC
  Phone: 405.701.3167
  3700 W. Robinson, Suite 200
  Norman, OK 73072
  E-mail: jeanna.d.abernathy@saic.com

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Thank you!

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Question and Answer Session

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