

*THE
THANKSGIVING
PROJECT*

*INDIRECT LEFT, CONCRETE PAVEMENT,
AND ADDITIONAL LANE
AT SR-20/US-31 IN DECATUR*

Who am I?

Clinton Baker, PE

Mississippi State University, Dec 2009

ALDOT Roadway Designer June 2010

Area Design Engineer June 2015

*THE
THANKSGIVING
PROJECT*

*INDIRECT LEFT, CONCRETE PAVEMENT,
AND ADDITIONAL LANE
AT SR-20/US-31 IN DECATUR*

Who else was involved?

ALDOT

- Jeff Webb
- Scott Hester
- Eli Borrelli
- Jud Young
- Allen Teague
- Mr. James D. Brown
- Mr. John R. Cooper

AECOM

- Eddie Lobdell
- Ryan Eckenrode, Steven Cox
- Mandy Phillips

City of Decatur

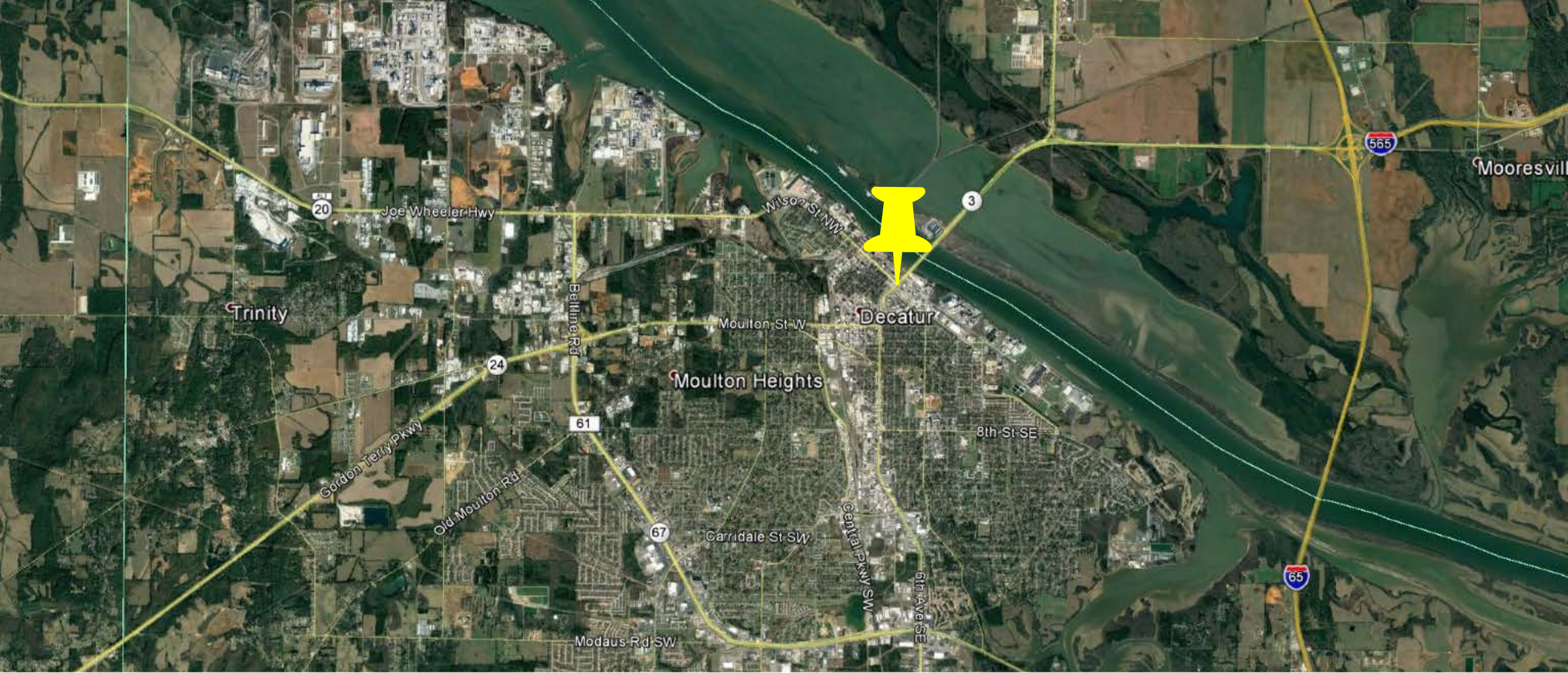
- Fmr Mayor Don Kyle
- Dewayne Hellums, MPO

*THE
THANKSGIVING
PROJECT*

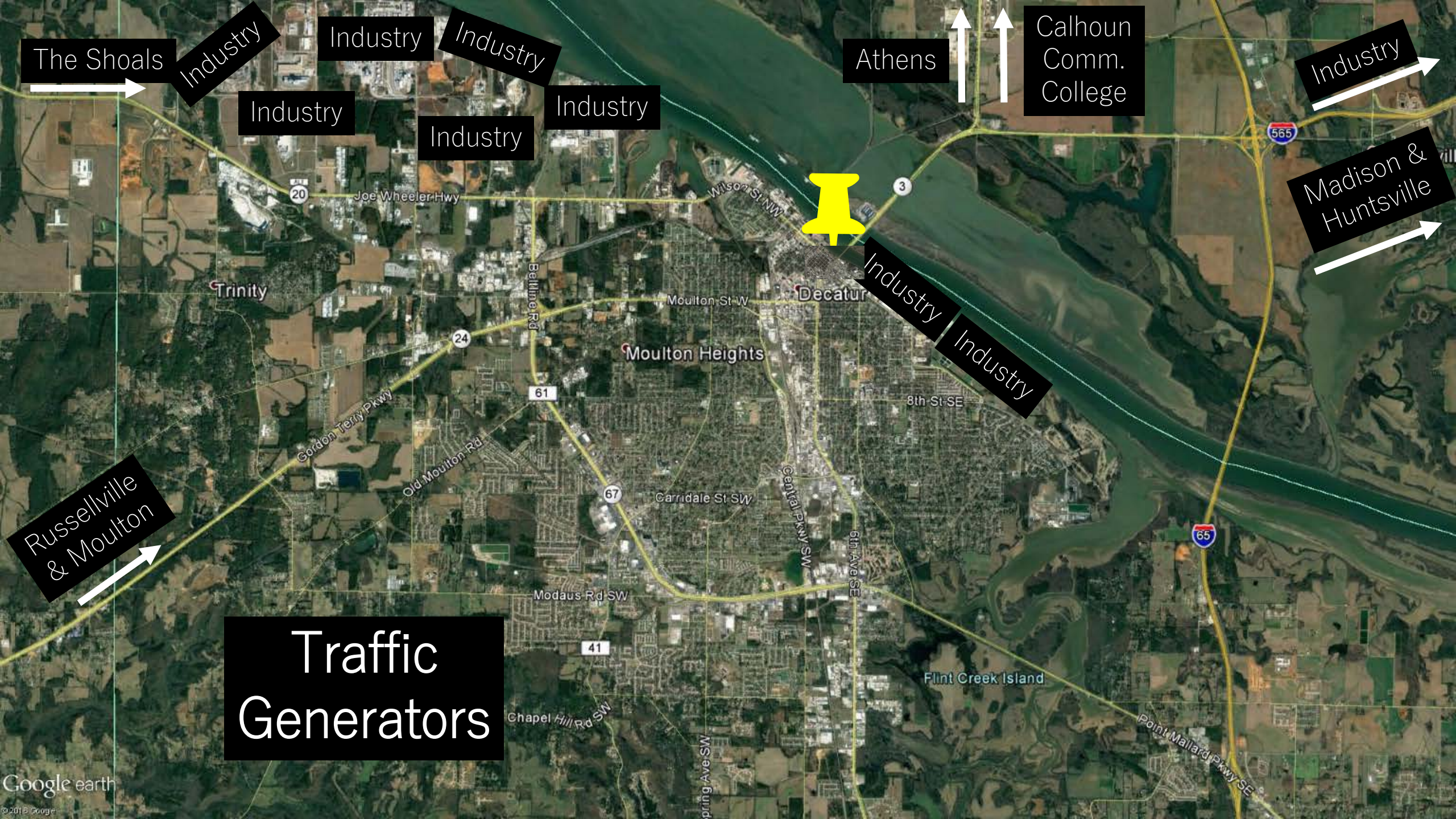
*INDIRECT LEFT, CONCRETE PAVEMENT,
AND ADDITIONAL LANE
AT SR-20/US-31 IN DECATUR*

*THE
THANKSGIVING
PROJECT*

*INDIRECT LEFT
AT SR-20/US-31 IN DECATUR*



Where is it?



The Shoals

Industry

Industry

Industry

Industry

Industry

Industry

Athens

Calhoun
Comm.
College

Industry

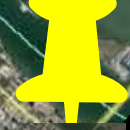
Madison &
Huntsville

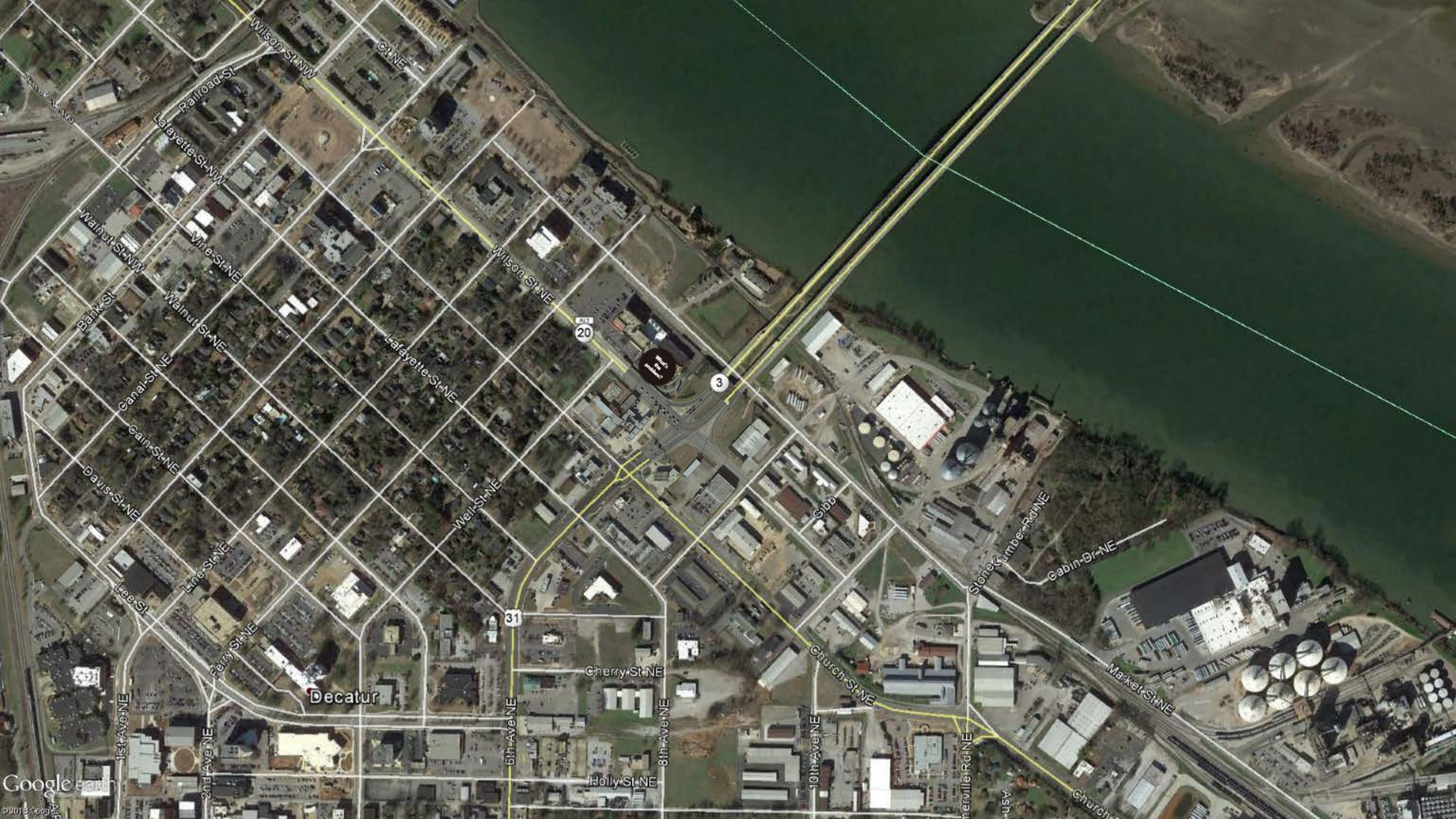
Industry

Industry

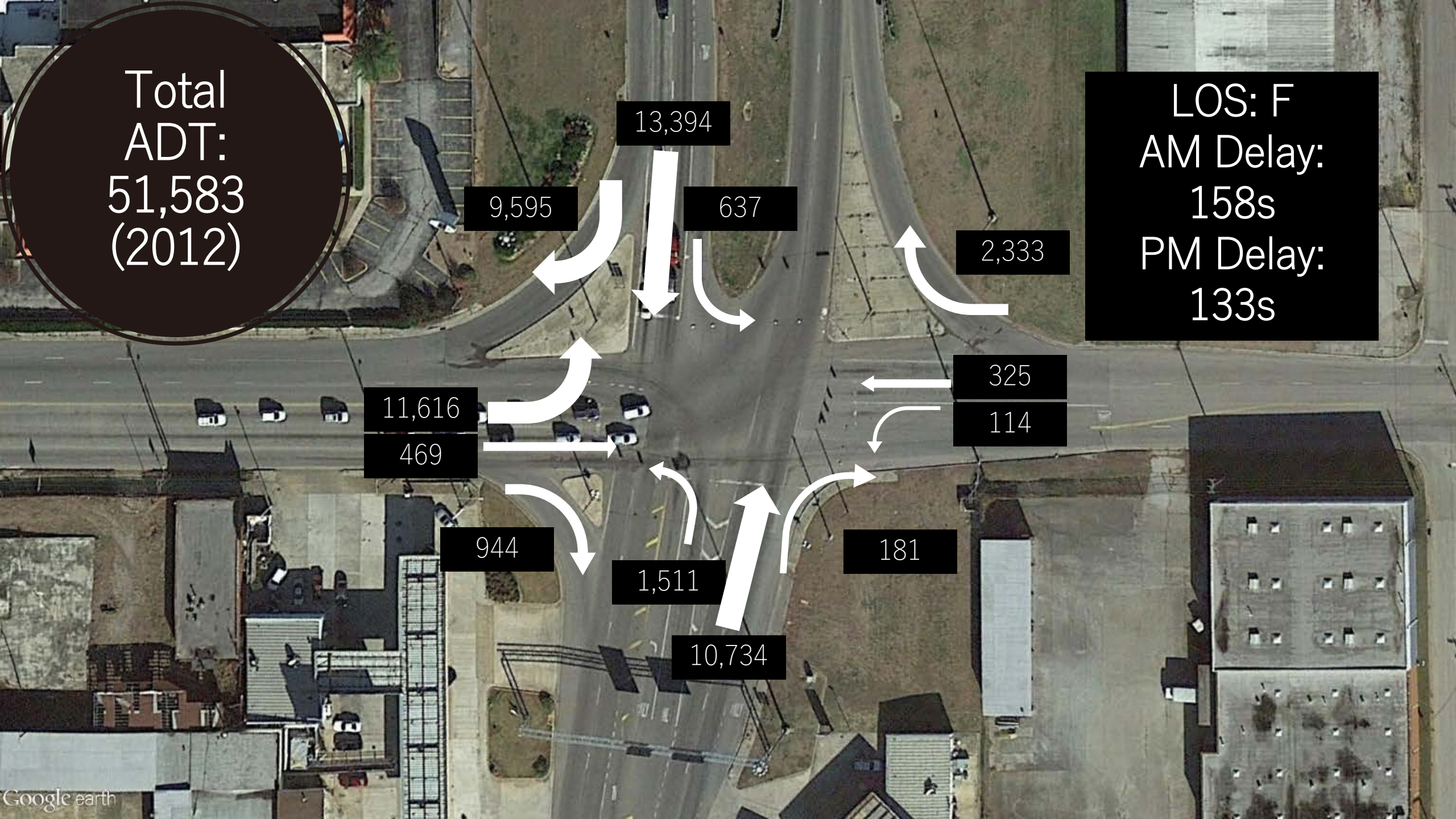
Russellville
& Moulton

Traffic
Generators





What's
the
problem?



Total
ADT:
51,583
(2012)

LOS: F
AM Delay:
158s
PM Delay:
133s

13,394

9,595

637

2,333

11,616
469

325
114

944

1,511

181

10,734

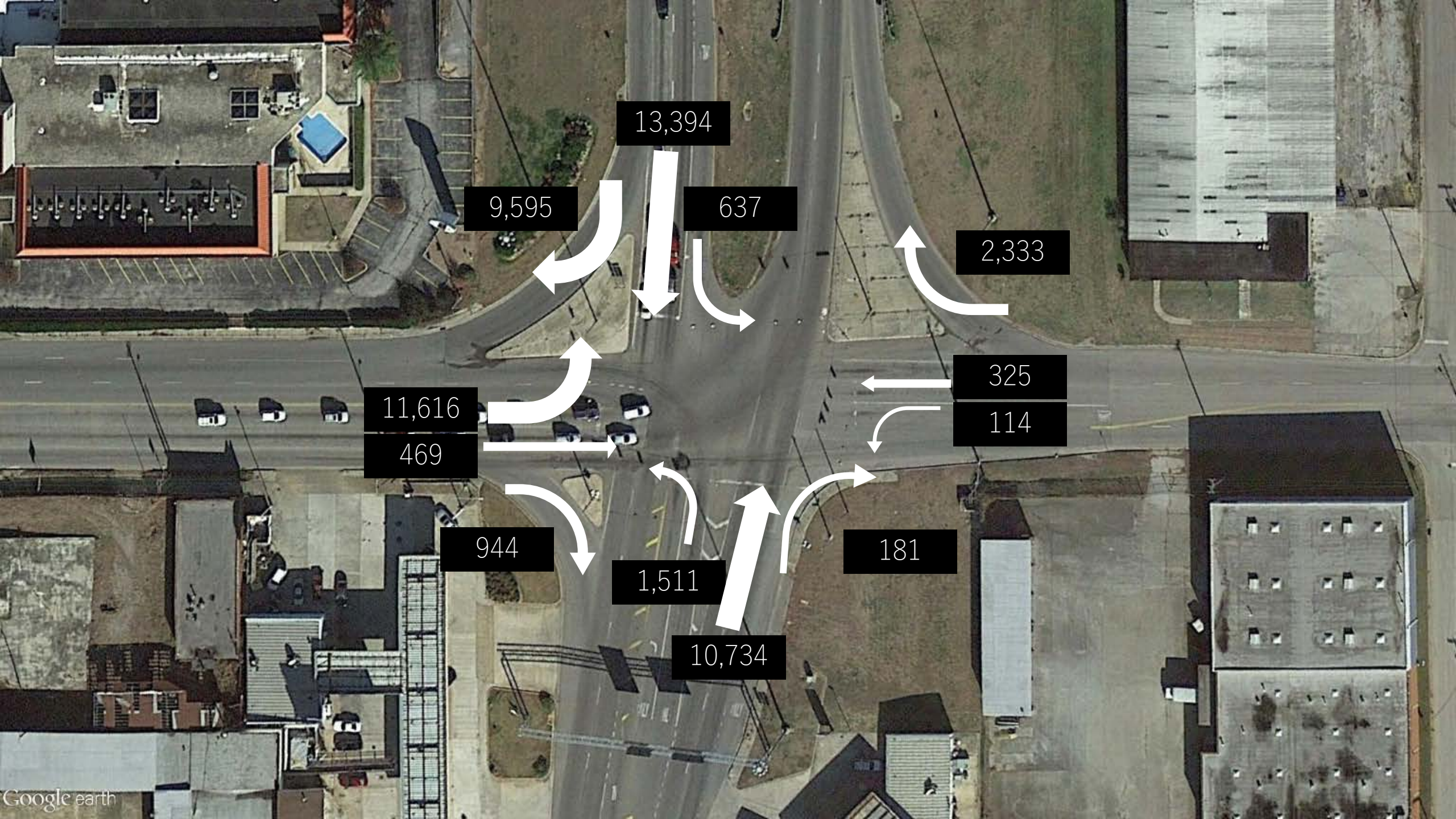
How bad
was it,
really?

AM Queue Length: $\frac{1}{2}$ mi

PM Queue Length: 2 mi







13,394

9,595

637

2,333

325

114

181

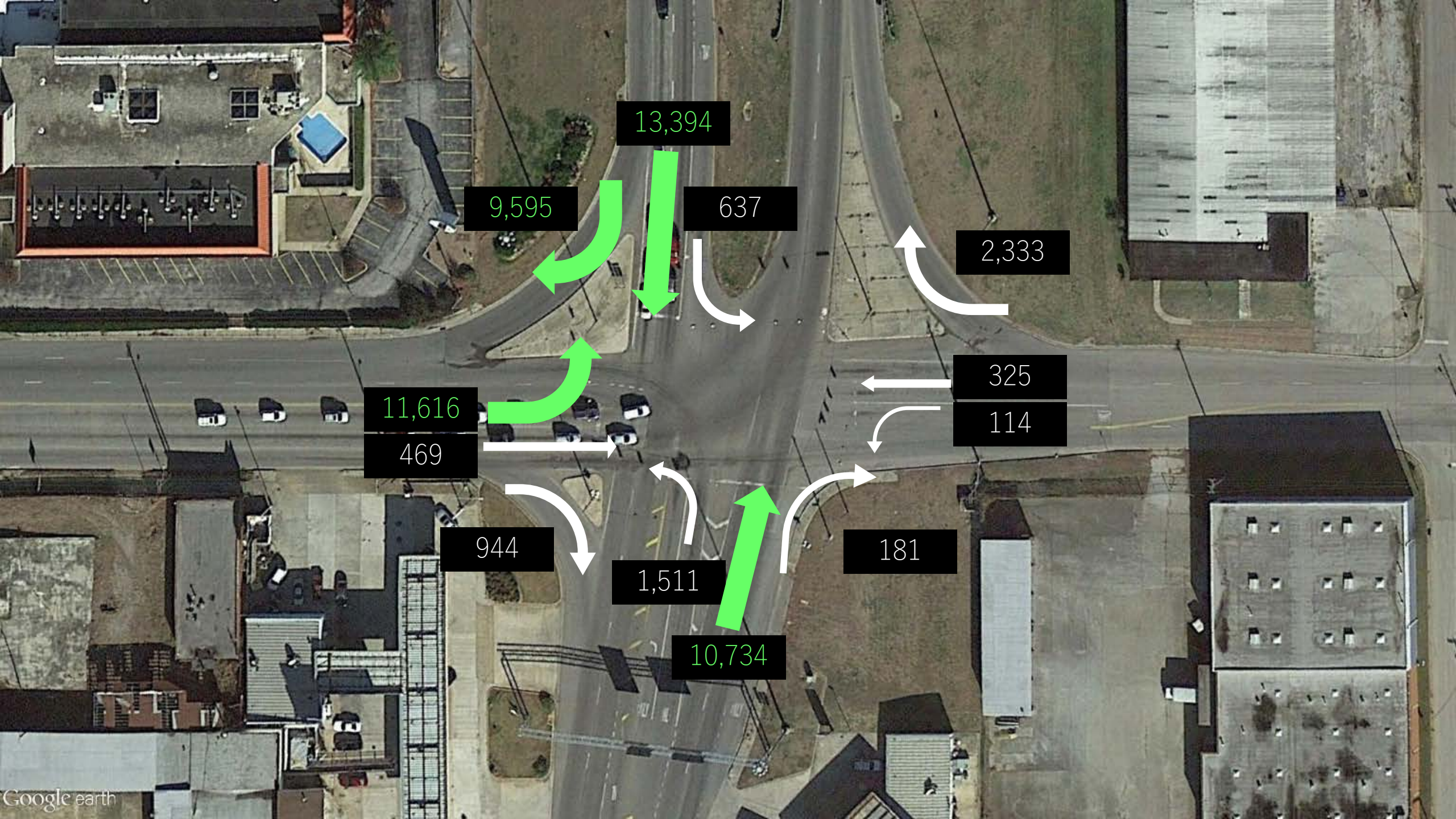
10,734

1,511

944

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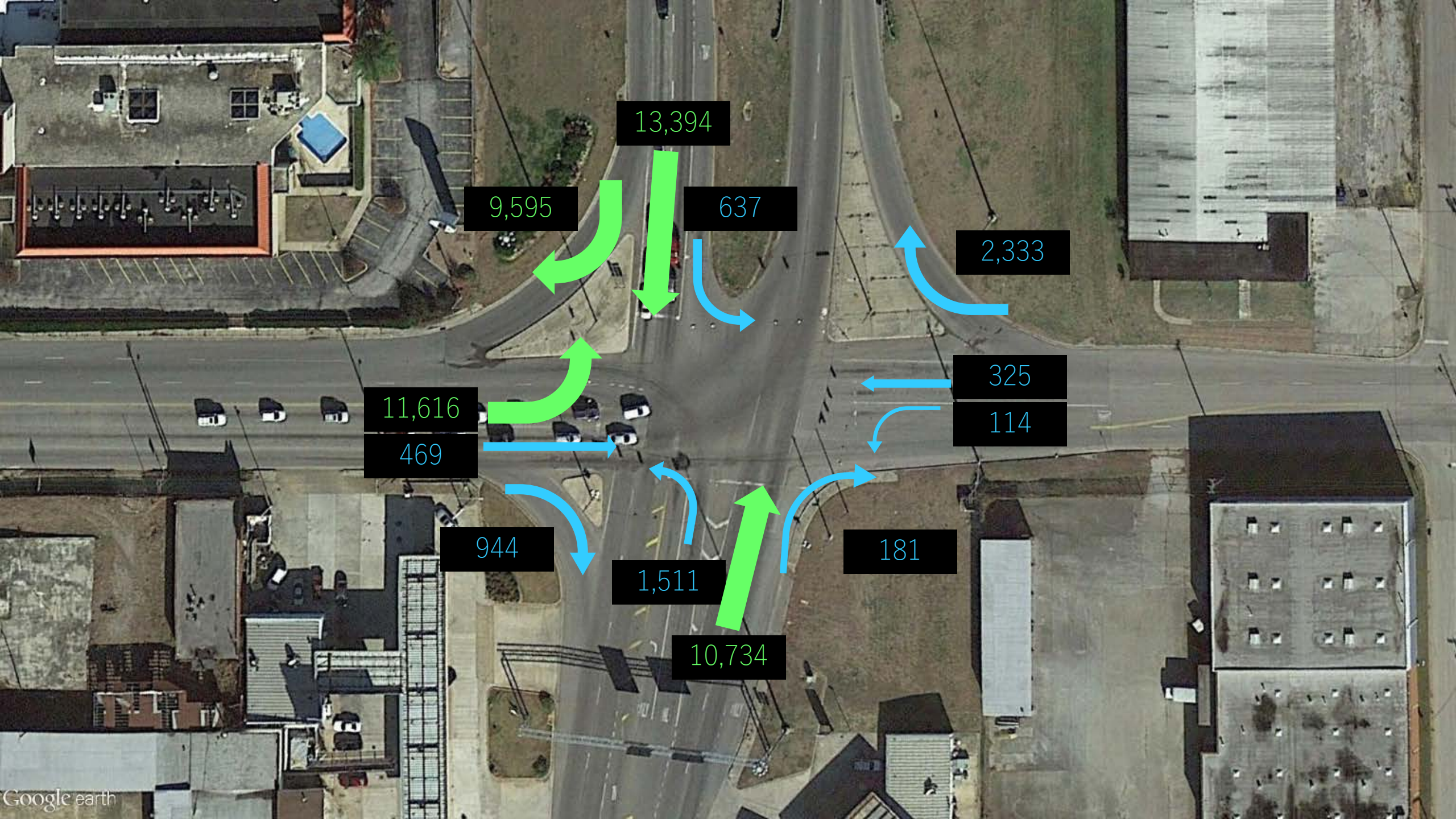
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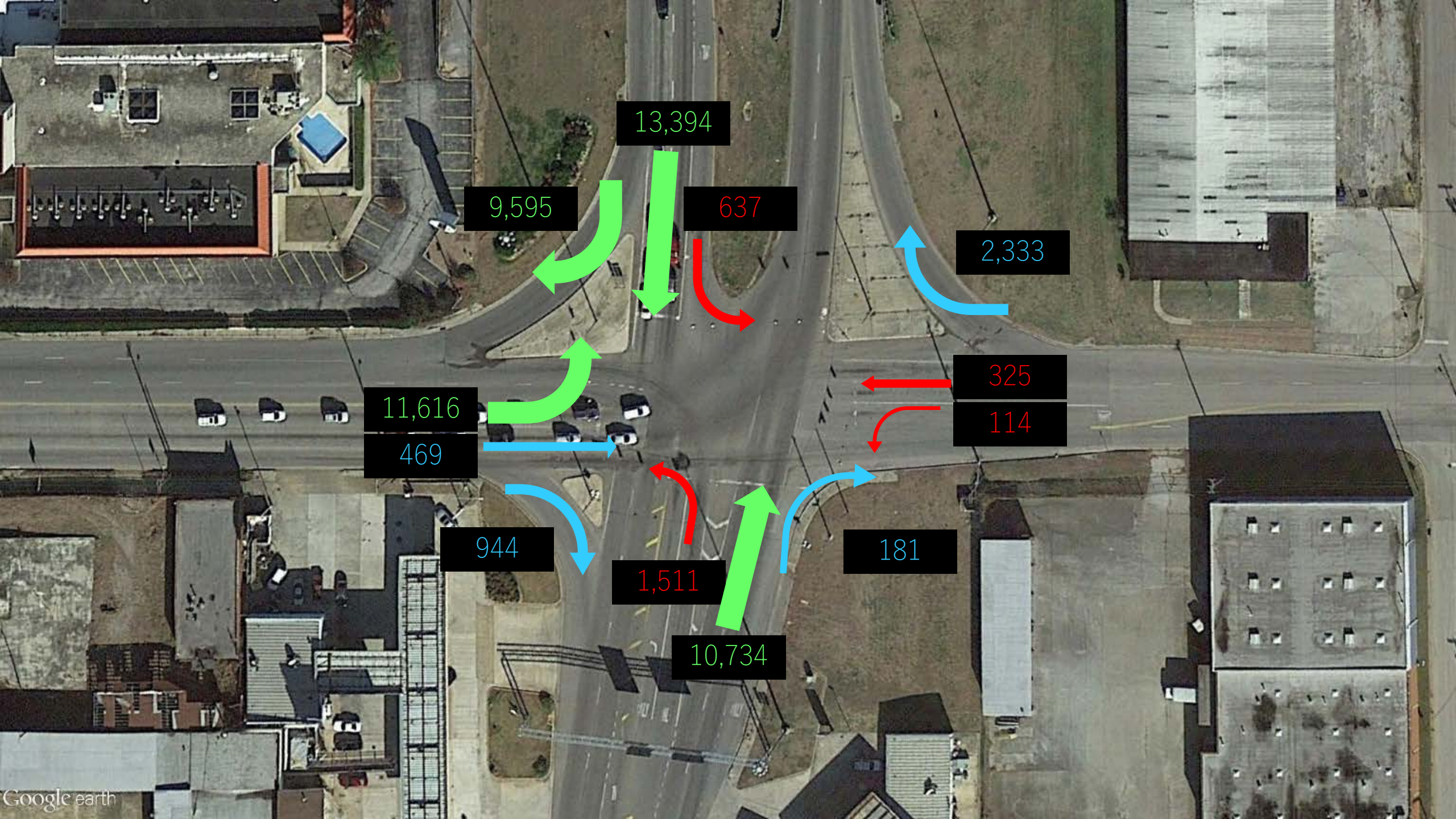
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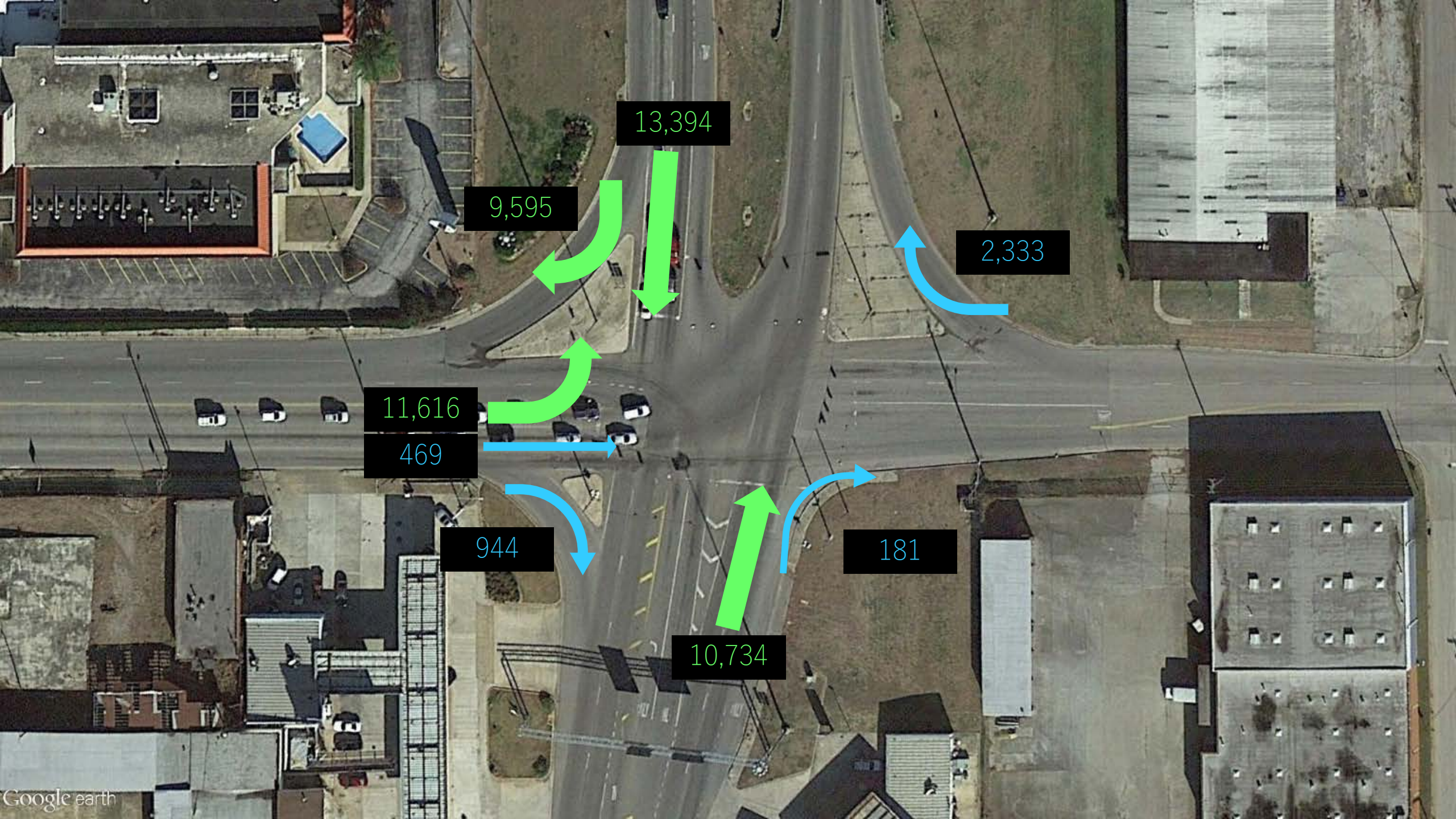
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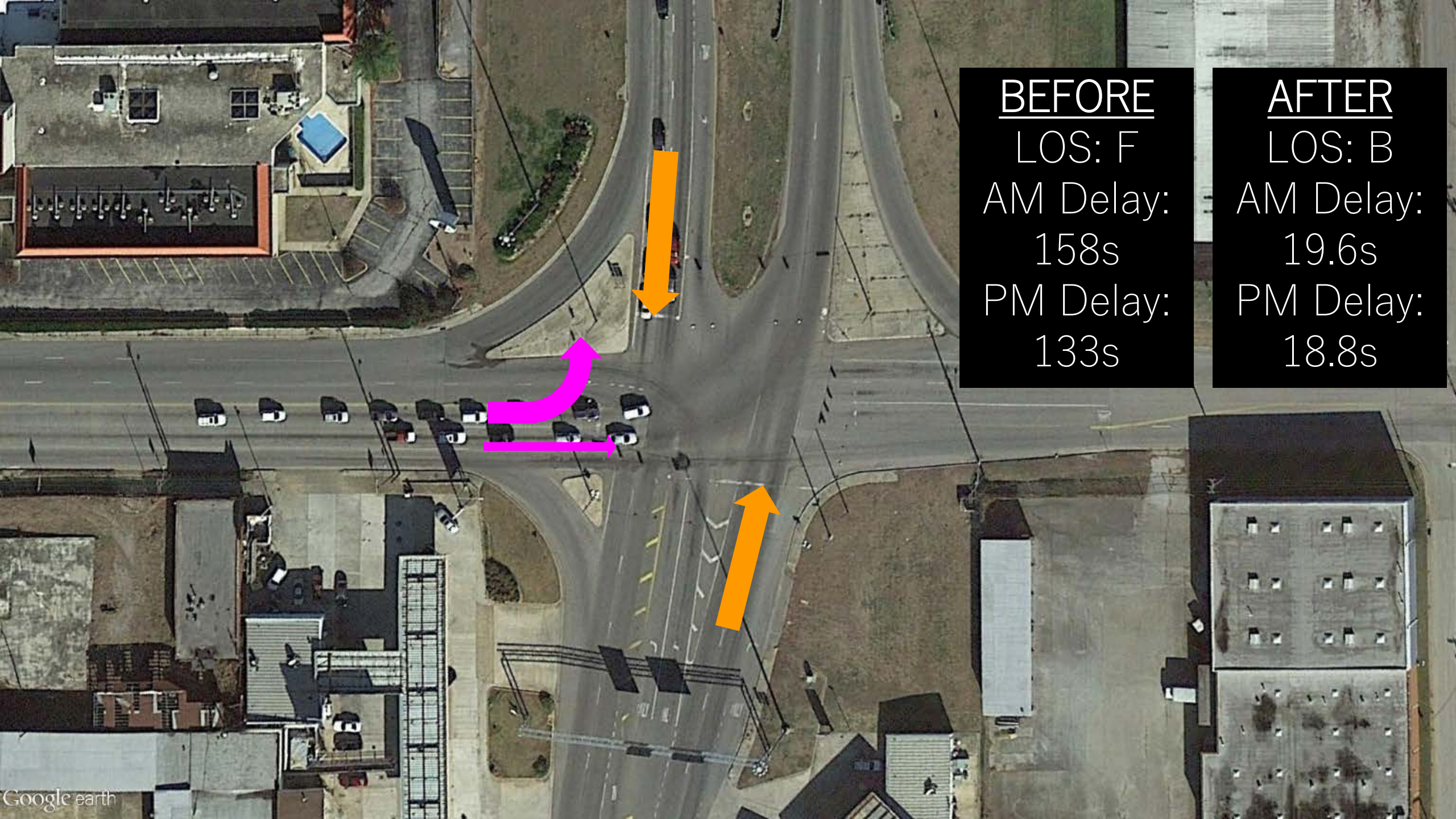
11,616

469

944

181

10,734

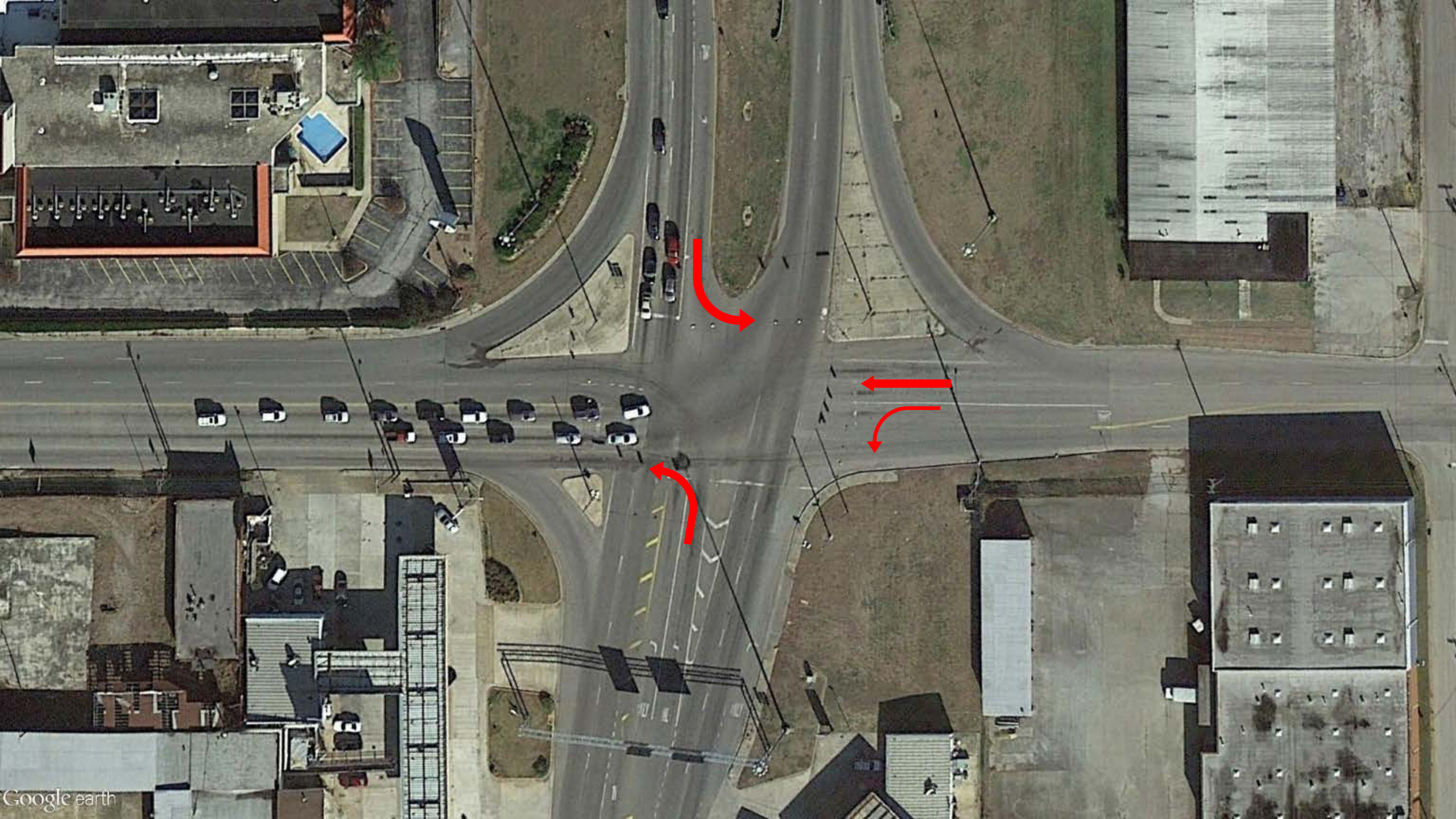


BEFORE

LOS: F
AM Delay:
158s
PM Delay:
133s

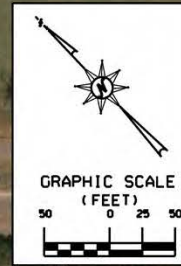
AFTER

LOS: B
AM Delay:
19.6s
PM Delay:
18.8s

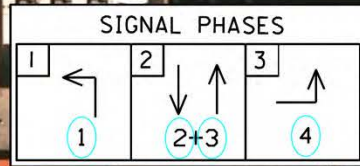


SR-20/US-31 INTERSECTION IN DECATUR

TRADITIONAL ALT 31-N TO 20-W USE TRADITIONAL LEFT (3 PHASE SIGNAL)



MARKET ST



52' TOTAL DECK WIDTH (NARROWS TO 40' AHEAD)

FOUR 11' LANES (W/ 4' SHLDS) (CONTINUE THREE THRU CAUSEWAY TO SR-20/US-31 INTERSECTION)

BEGIN RIVER BRIDGES

WILSON ST

CHURCH ST

SR-20

DEAD END

DEAD END

SR-20 EB TRIPLE LEFT

US-31

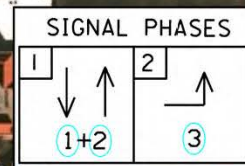
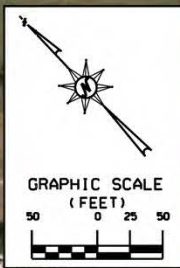
FERRY ST

WELL ST

SR-20/US-31 INTERSECTION IN DECATUR

MARKET ST ALT

31-N TO 20-W USE RAMP
VIA MARKET ST & FERRY ST



52' DECK WIDTH
(NARROWS TO 40' AHEAD)

FOUR 11' LANES (W/ 4' SHLDS)
(CONTINUE THREE THRU CAUSEWAY
TO SR-20/US-31 INTERSECTION)

BEGIN
RIVER
BRIDGES

CLOSE / REMOVE
WILSON ST.

WILSON ST

US-31 NB
TRIPLE
THRU

CHURCH ST

SR-20 EB
TRIPLE
LEFT

60' ROW

100' ROW

100' ROW

CONVERT
TO ONE WAY

FERRY ST

SR-20

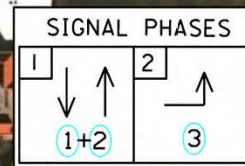
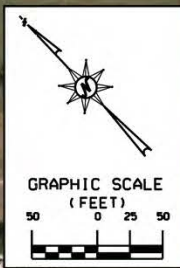
MARKET ST

WELL ST

SR-20/US-31 INTERSECTION IN DECATUR

MARKET ST ALT

31-N TO 20-W USE RAMP
VIA MARKET ST & FERRY ST



52' DECK WIDTH
(NARROWS TO 40' AHEAD)

FOUR 11' LANES (W/ 4' SHLDS)
(CONTINUE THREE THRU CAUSEWAY
TO SR-20/US-31 INTERSECTION)

BEGIN
RIVER
BRIDGES

CONVERT
TO ONE WAY

FERRY ST

SR-20

CONC

DEAD
END

CONC

DEAD
END

WELL ST

60' ROW

SR-20 EB
TRIPLE
LEFT

PRES ROW

100' ROW

WILSON ST

MONITORING
WELLS

US-31 NB
TRIPLE
THRU

MOD 720

CHURCH ST

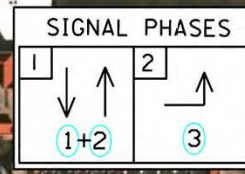
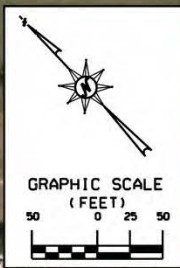
100' ROW

PRES ROW

SR-20/US-31 INTERSECTION IN DECATUR

"TEXAS U" ALT

31-N TO 20-W USE RAMP
VIA MARKET ST & FERRY ST



52' DECK WIDTH
(NARROWS TO 40' AHEAD)

THREE 11' LANES
(CONTINUE THREE THRU CAUSEWAY
TO SR-20/US-31 INTERSECTION)

20'+ ELEV
SEPARATION

RET WALL
>10%
UPGRADE

BEGIN
RIVER
BRIDGES

SR-20

CONC

DEAD
END

CONC

DEAD
END

WELL ST

60'
ROW

SR-20 EB
TRIPLE
LEFT

PRES ROW

100'
ROW

CONC

PRES ROW

MONITORING
WELLS

US-31 NB
TRIPLE
THRU

CONC

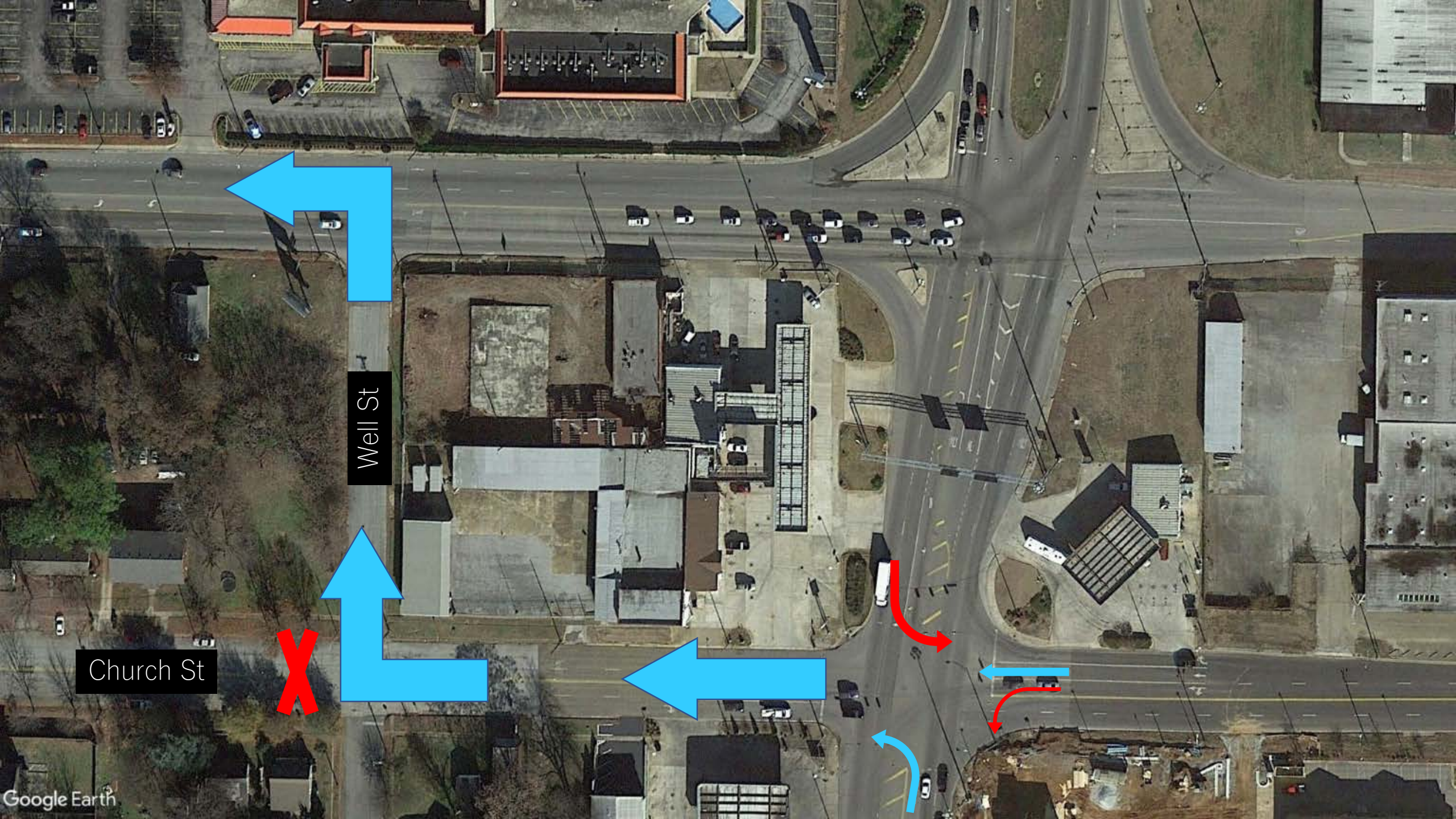
PRES ROW

CHURCH ST

100'
ROW

WILSON ST





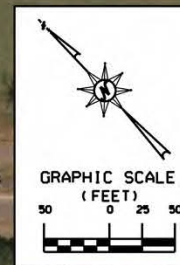
Well St

Church St

SR-20/US-31 INTERSECTION IN DECATUR

CHURCH ST ALT

31-N TO 20-W USE DISPLACED LEFT
VIA CHURCH ST & WELL ST



52' TOTAL DECK WIDTH
(NARROWS TO 40' AHEAD)

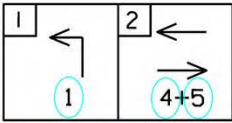
FOUR 11' LANES (W/ 4' SHLDS)
(CONTINUE THREE THRU CAUSEWAY
TO SR-20/US-31 INTERSECTION)

BEGIN
RIVER
BRIDGES

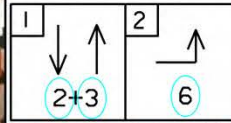
WILSON ST

CHURCH ST

SIGNAL PHASES



SIGNAL PHASES



SR-20

CONC

FERRY ST

WELL ST

CONVERT
TO ONE WAY

SR-20 EB
TRIPLE
LEFT

US-31

OVERHEAD SIGN
(REMOVE)

CUL-DE-
-SAC

CONC

DUAL 100'
LEFT BAYS

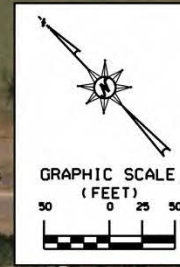
Created 5/1/2013

Shown in *Decatur Daily*
5/12/2013

SR-20/US-31 INTERSECTION IN DECATUR

CHURCH ST ALT

31-N TO 20-W USE DISPLACED LEFT
VIA CHURCH ST & WELL ST



52' TOTAL DECK WIDTH
(NARROWS TO 40' AHEAD)

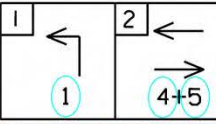
FOUR 11' LANES (W/ 4' SHLDS)
(CONTINUE THREE THRU CAUSEWAY
TO SR-20/US-31 INTERSECTION)

BEGIN
RIVER
BRIDGES

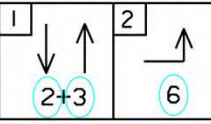
WILSON ST

CHURCH ST

SIGNAL PHASES



SIGNAL PHASES



RIGHT-IN
RIGHT-OUT

SR-20

CONC

DEAD
END

FERRY ST

WELL ST

CONVERT
TO ONE WAY

SR-20 EB
TRIPLE
LEFT

60' ROW

R 75'

US-31

OVERHEAD SIGN
(REMOVE)

CONC
ISLAND

R 15'

R 50'

100' ROW

DUAL 100' LEFT BAYS

100' ROW

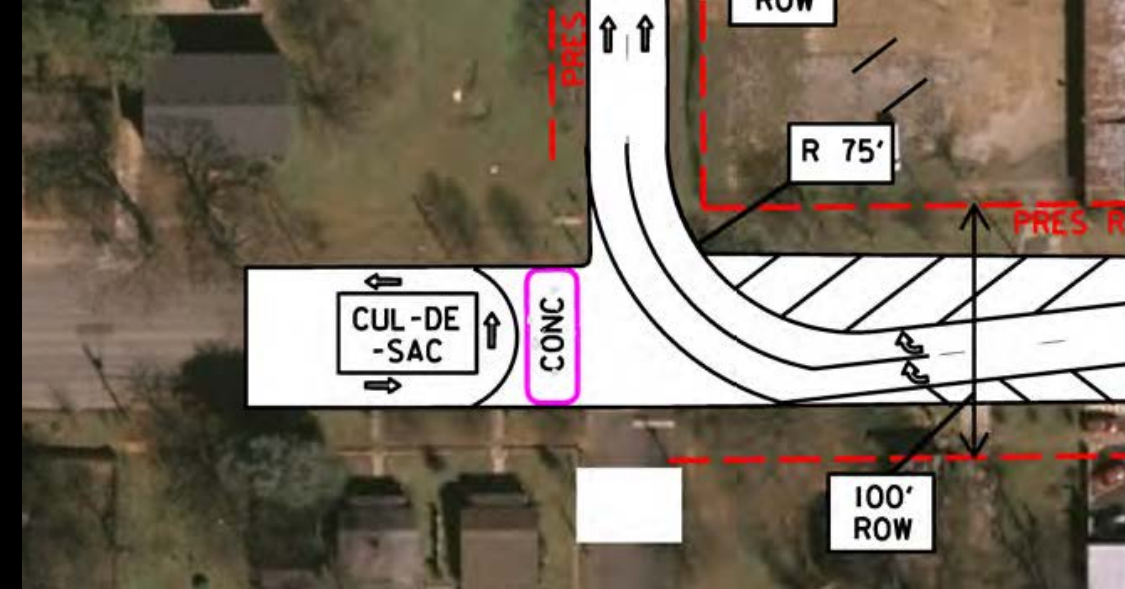
As shown for
Public Hearing
5/16/2013

My claim to fame

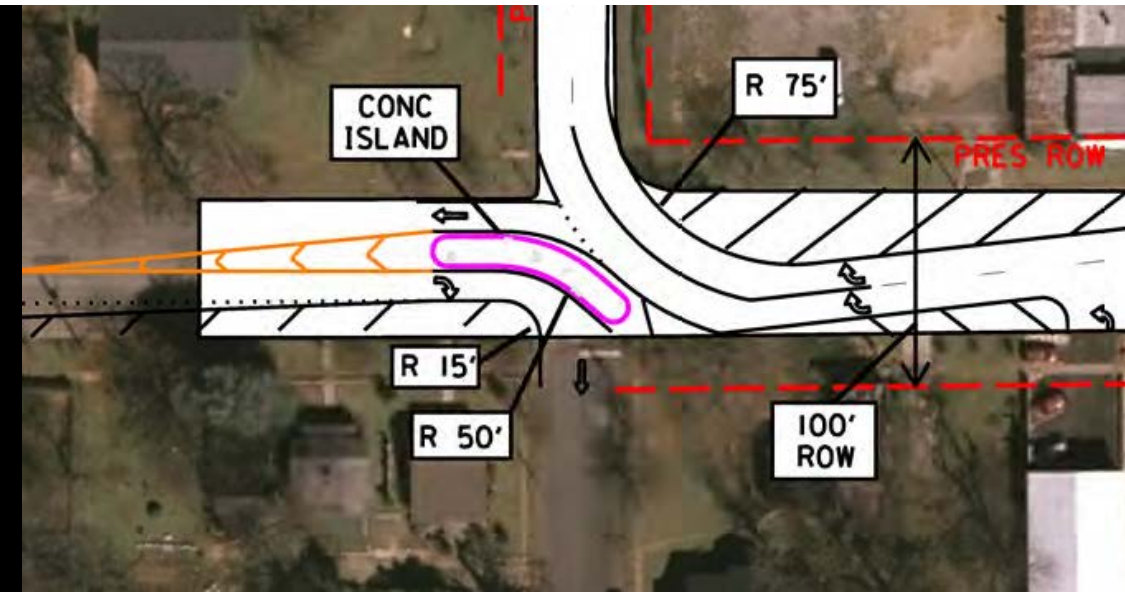
ALDOT changes intersection plan

By Ben Montgomery
The Decatur Daily

@dd_bmontgomery May 26, 2013 0



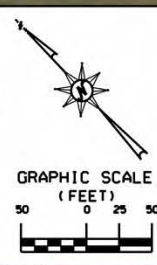
"There is no incentive to go up Church Street anymore," Baker said. "All y'all freaked out about that, and we changed it."



SR-20/US-31 INTERSECTION IN DECATUR

CHURCH ST ALT

31-N TO 20-W USE DISPLACED LEFT
VIA CHURCH ST & WELL ST



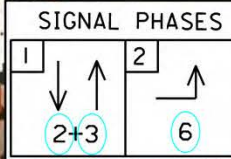
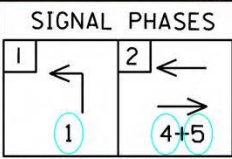
52' TOTAL DECK WIDTH
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FOUR 11' LANES (W/ 4' SHLDS)
(CONTINUE THREE THRU CAUSEWAY
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BEGIN
RIVER
BRIDGES

WILSON ST

CHURCH ST



RIGHT-IN
RIGHT-OUT

SR-20

CONC

DEAD
END

FERRY ST

WELL ST

CONVERT
TO ONE WAY

SR-20 EB
TRIPLE
LEFT

60' ROW

R 75'

CONC
ISLAND

CONC
ISLAND

100' ROW

US-31

PRE'S ROW

OVERHEAD SIGN
(REMOVE)

PRE'S ROW

DUAL 100'
LEFT BAYS

100' ROW

Revised after
Public Hearing
comments
5/23/2013



EXISTING PM TRAFFIC



PROPOSED PM TRAFFIC

Origin-Destination Study

Lobdell said they would look at “how traffic flows through that entire area — whether there are some people (who) are trying to avoid that intersection and going through the historic district.”

Decatur Daily, 9/3/13



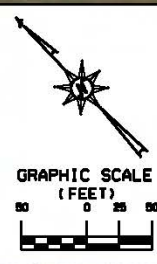
Not-so-smooth sailing

- Design started – Spring 2013
- Several months of discussions with two adjoining historical districts and SHPO
- Something about a toll bridge?
- Project letting – Feb 2015

NHF-0020(517)
SR-20/US-31 INTERSECTION IN DECATUR

TRIPLE LEFT SR-20 EB
WITH SIDEWALKS/CROSSWALKS & ADA RAMP

02/22/16



CONTINUE
PROJECT
TO SR-20/
US-31 SPLIT

TIE TO
EX SHARED-
USE PATH

REOD
SDWK

WILSON ST

REOD BOLLARDS

CHURCH ST

SR-20

REOD 5'x5'
LANDING AREA
(200' SPACING)

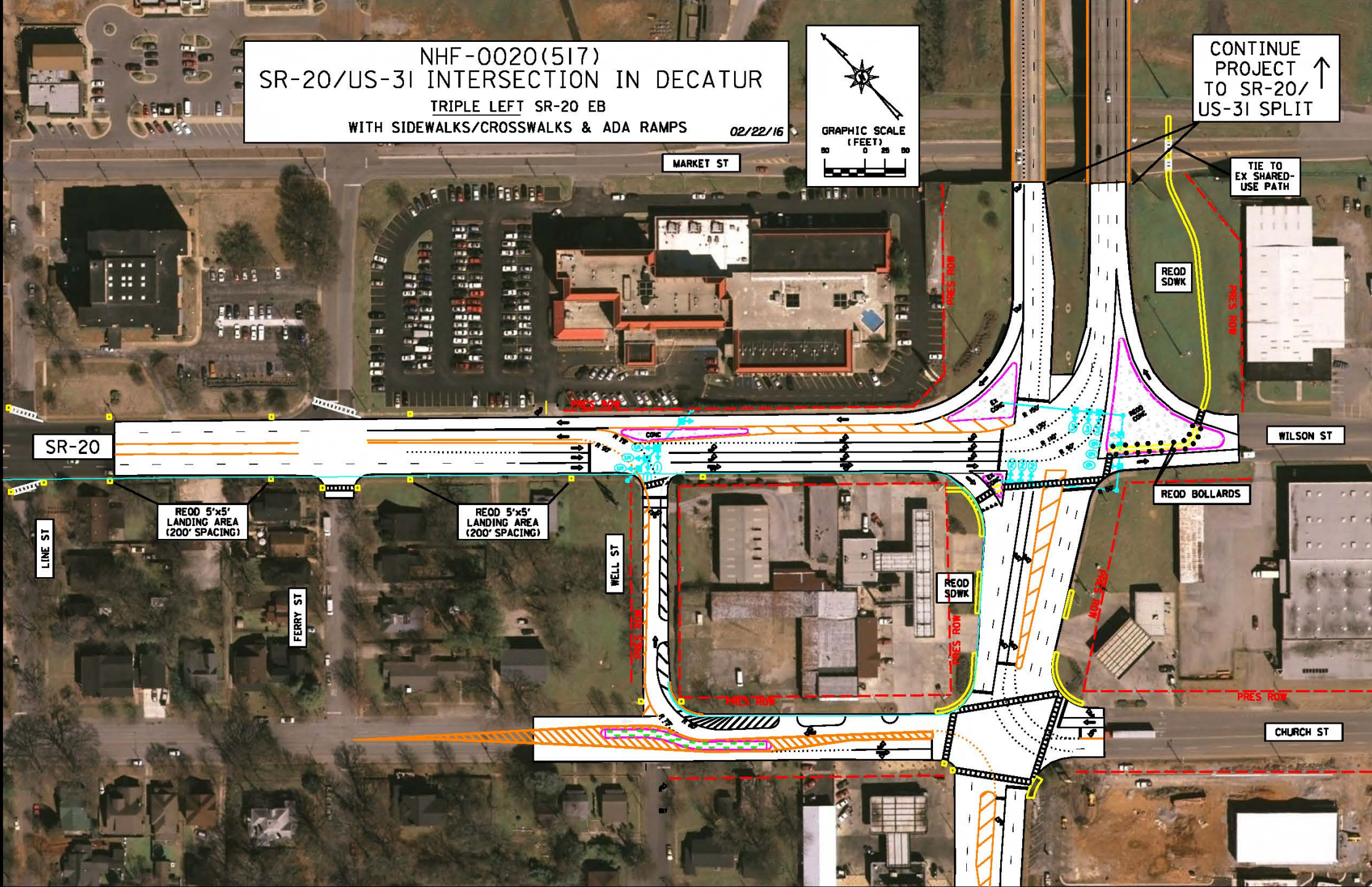
REOD 5'x5'
LANDING AREA
(200' SPACING)

WELL ST

REOD
SDWK

LINE ST

FERRY ST







AM Queue Length: 1/3 mi

AM Queue Length: 1/2 mi

PM Queue Length: 2 mi

PM Queue Length: 2/3 mi



One EB Lane

Two EB Lanes

Three EB Lanes



How does it look for the long run?

- Projected LOS E in 2031.
 - Analysis performed before Polaris, before Toyota/Mazda
- Anything further would require drastic (i.e.: grade-separation) changes.
- But in the end...

One last thing

THE THANKSGIVING PROJECT

Summer start for ALDOT project

US 31-Alabama 20 work may begin in August in Decatur

By Ben Montgomery Staff Writer Jun 20, 2013

“We want to get this done at least by the beginning of the year,” ██████ said. “There’s already some construction movement out there. They are making sure the utilities are deep enough for the new concrete.”

Intersection changes concern residents

By Ben Montgomery and Bill Campbell Staff Writers May 17, 2013

But the changes were OK’d by the region’s Metropolitan Planning Organization with a pledge from ALDOT ██████
██████ to try to have all work completed by Christmas.

But we never said which year!