







## **Proposed Improvements**











## Purpose and Need

The Purpose and Need of the Proposed Project is to Improve the Pavement Condition, Highway

Safety, and Operations.

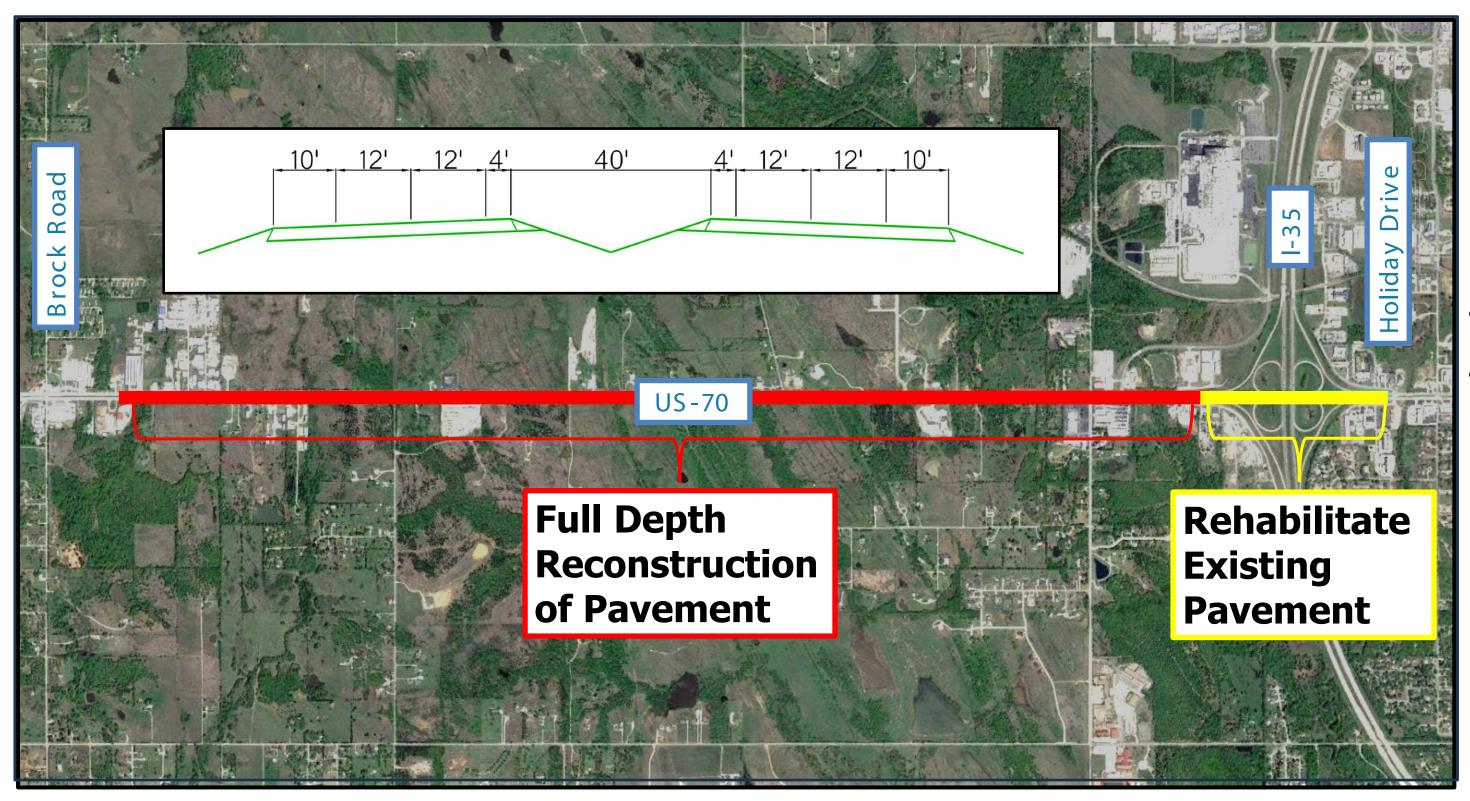
- To Improve Pavement Conditions:
  - Replace Pavement (Majority of Area)
  - > Rehabilitate Pavement
- To Improve Highway Safety and Operations:
  - > Correct Sight-Distance and Grade Issues (Cutting Down Hills and Filling in Valleys)
  - > Add Deceleration Lanes at Section Line Roads and Median Openings
  - > Address Access Management Issues (Review Driveway and Median Locations)
  - Make Additional Operational Improvements (Review Traffic Signals, Turn Lanes, etc.)







## **Improve Pavement Conditions Along Corridor**



## **Proposed Improvements**

- Reconstruction
- Rehabilitation



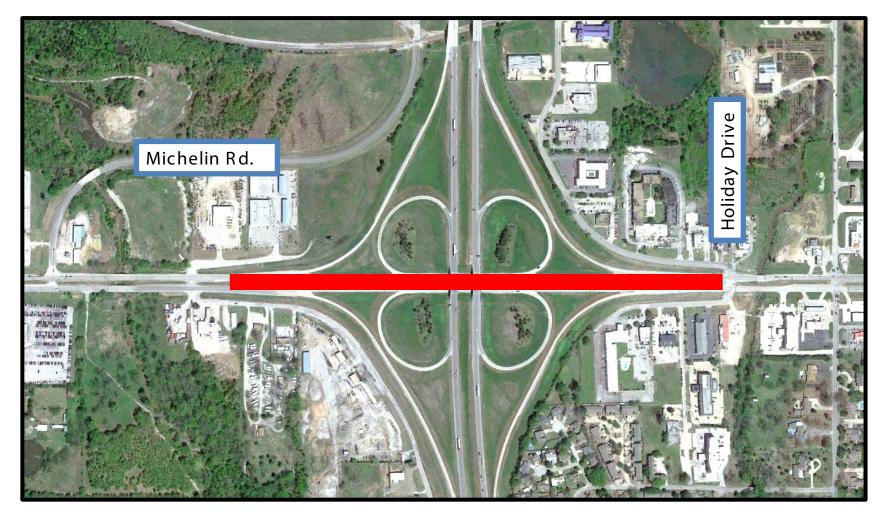












#### **Pavement Issues**















#### **Existing Daily Traffic**

- Traffic Data has been Developed for US-70 and all Local Roads
- US-70 has over 20,000
   Vehicles Per Day







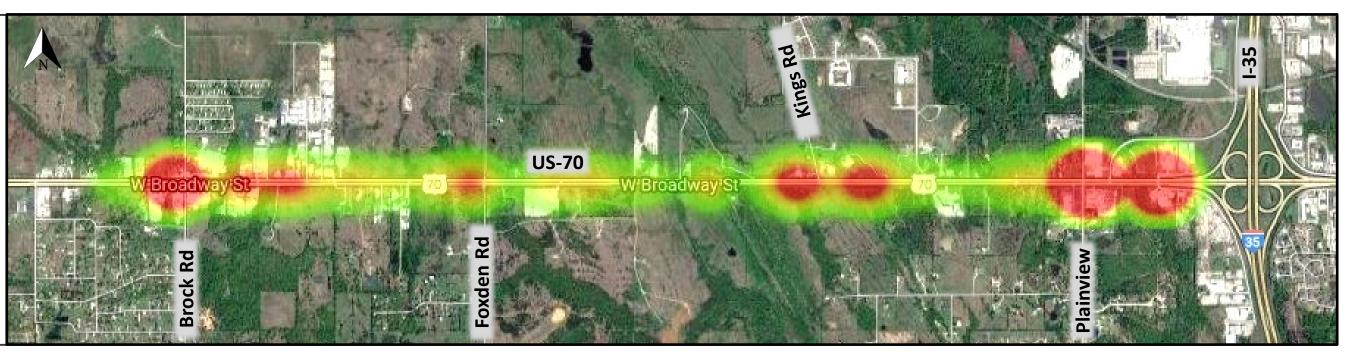


**LEGEND** 

LOW

HIGH

325 TOTAL COLLISIONS PDO (244) POSSIBLE INJURY (52) NI INJURY (17) SS INJURY (11) FATALITY (1)



# 10 Year Collision Data

#### **LEGEND**

PEDESTRIAN/BIKE
COLLISIONS
(TOTAL - 0)

VEHICLE COLLISIONS (SUSPECTED SERIOUS INJURY – 11)

VEHICLE COLLISIONS (FATALITY – 1)

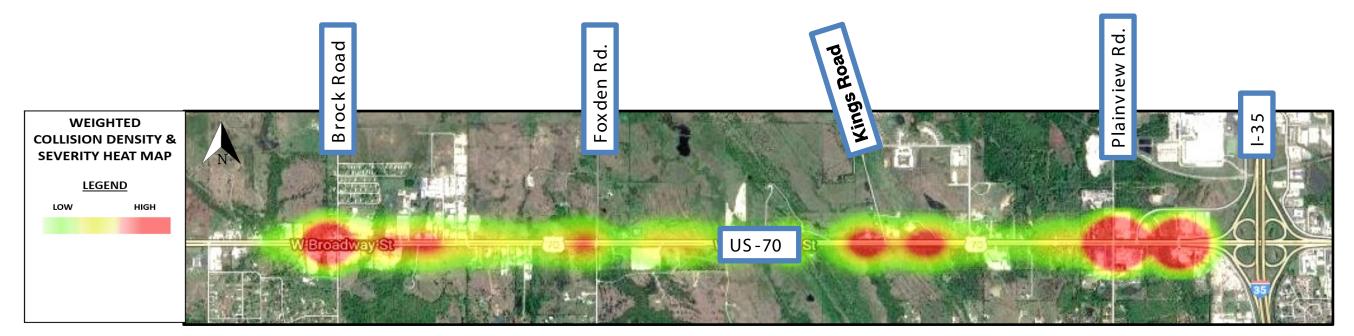




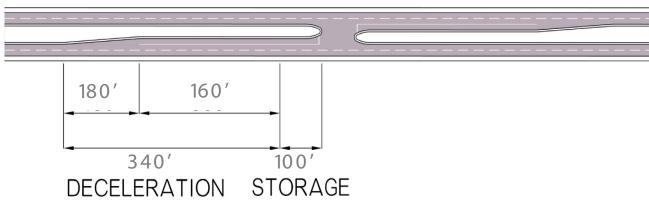








## Safety Improvements



#### **Differential Speed Reduction Measures**

- To Decelerate from 55 mph to Stopped Condition Requires 340 feet
- This Keeps Vehicles from Drastic Speed Reductions while in Mainline Lane
- A 100-foot Minimum Storage Length is Shown, But will Vary Depending on Locational Needs

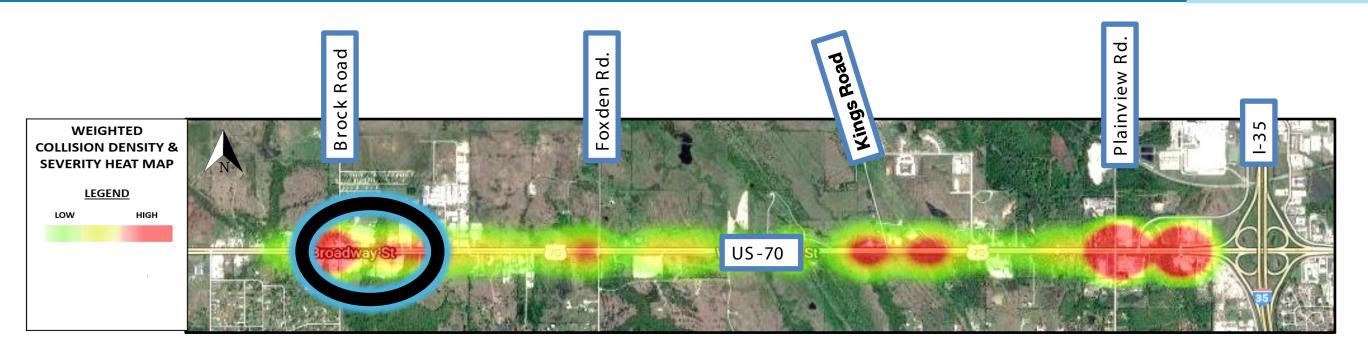
- Removal of Fixed Objects Located in Roadside Clear Zones
- Access Management
  - Removal of Unnecessary or Duplicate Drives
  - Consolidation of some Median Openings
- ➤ The Addition of Right-Turn Lanes
- Providing Adequate Sight-Distance
- Providing Adequate Deceleration Left-Turn Lanes with Proper Storage at All Median Openings



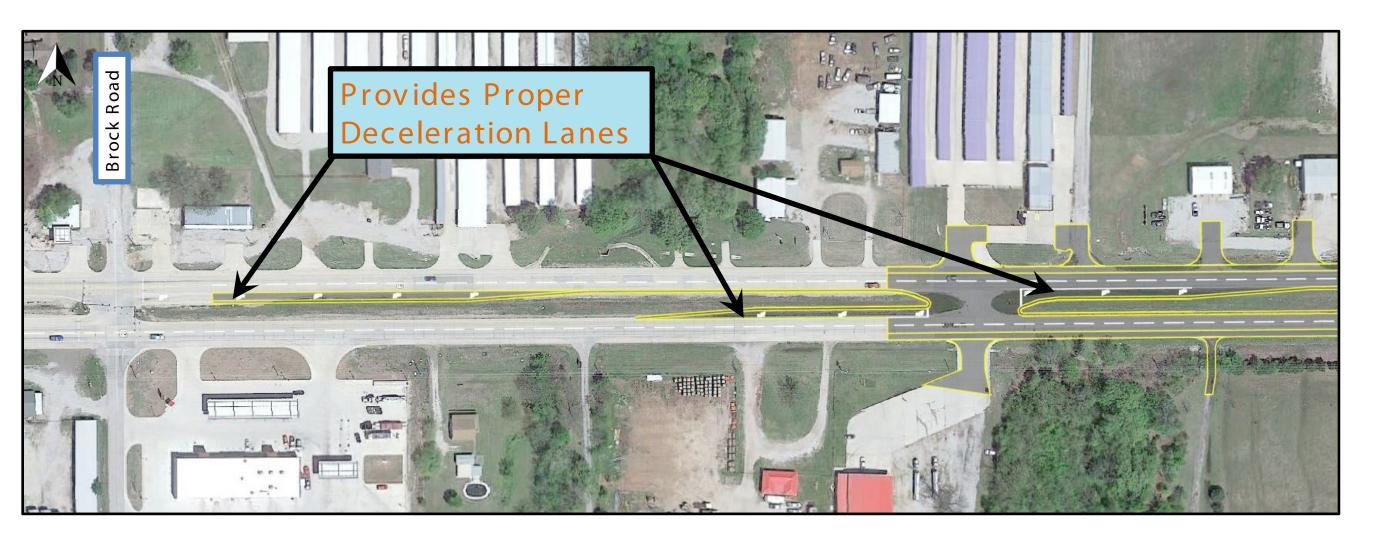








## **Safety Improvements**



#### Median Openings

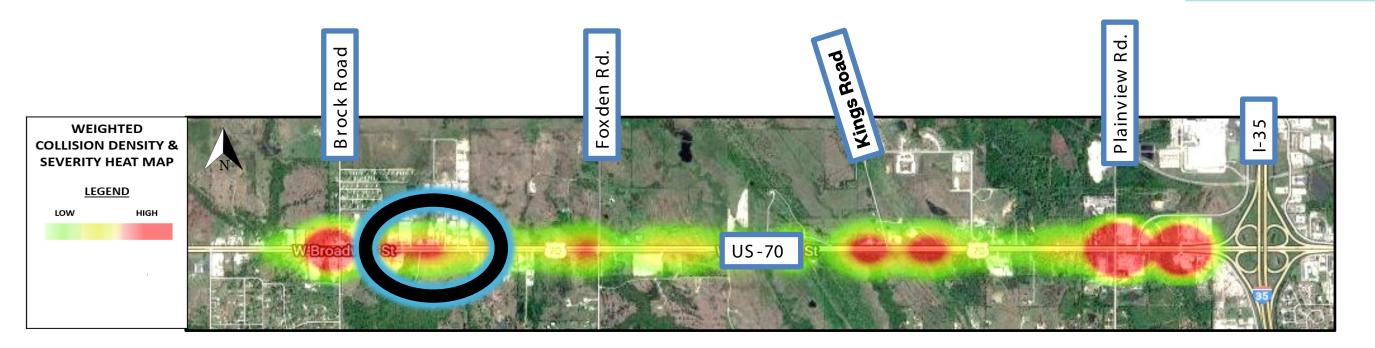
Provide AdequateDeceleration Left-TurnLanes with Proper Storage

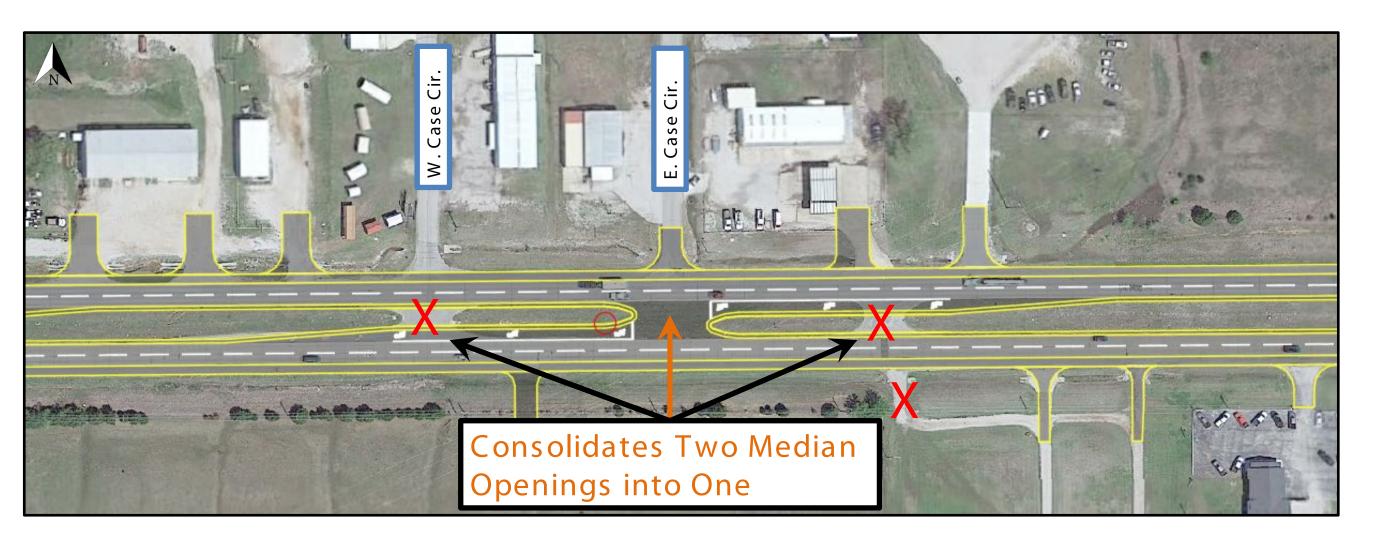












# **Safety Improvements**

## **Consolidate Median Openings**

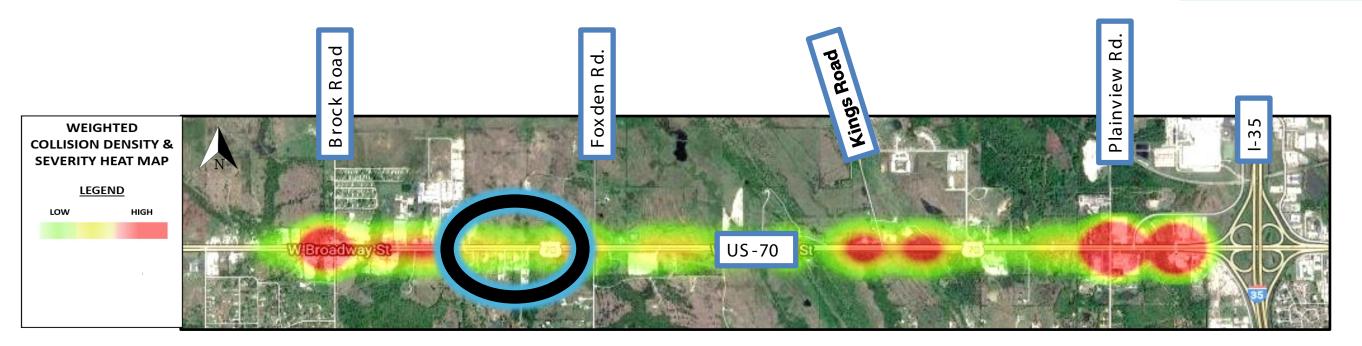
- Consolidates Two Median Openings into One
- Provide Adequate Deceleration Left-Turn Lanes











# Relocates Median Opening to a More Logical Place

# **Safety Improvements**

## **Appropriate Median Opening Locations**

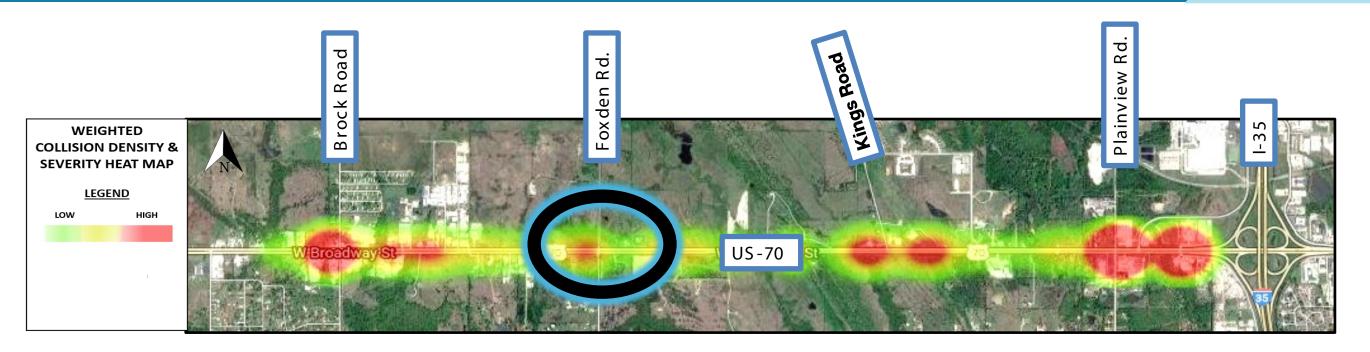
- Moves Opening to a Logical Location
- Provide Adequate Deceleration Left-Turn Lanes







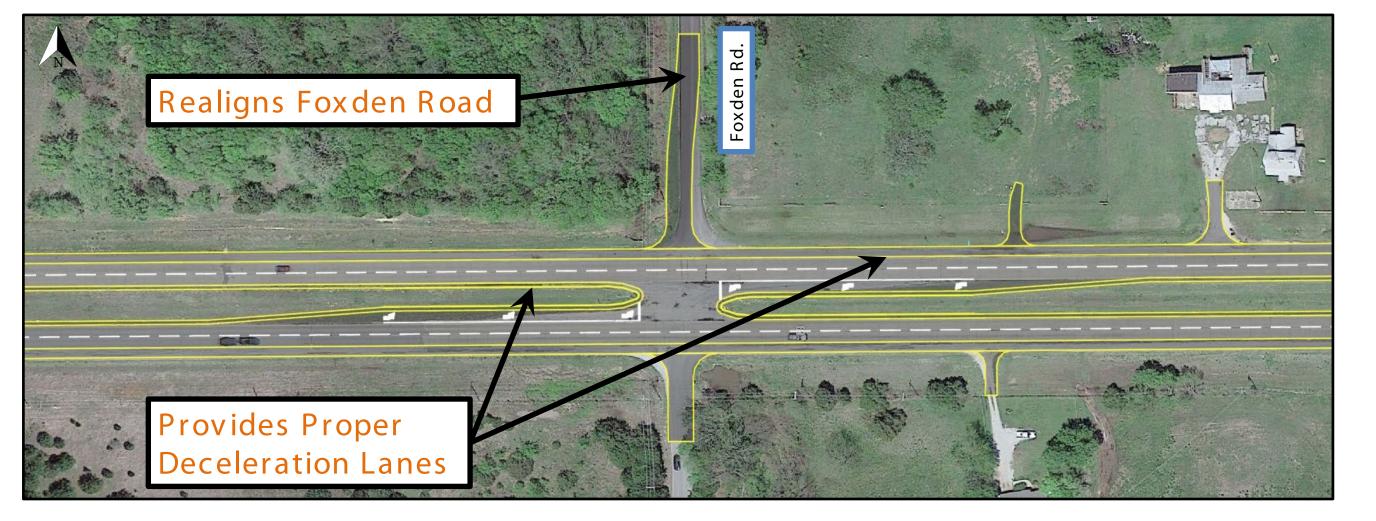




# **Safety Improvements**

## **Typical Section Line Road Median Opening**

- Provide Adequate Deceleration Left-Turn Lanes
- Realigns Foxden Road –
   Northside and Southside Will
   Line Up

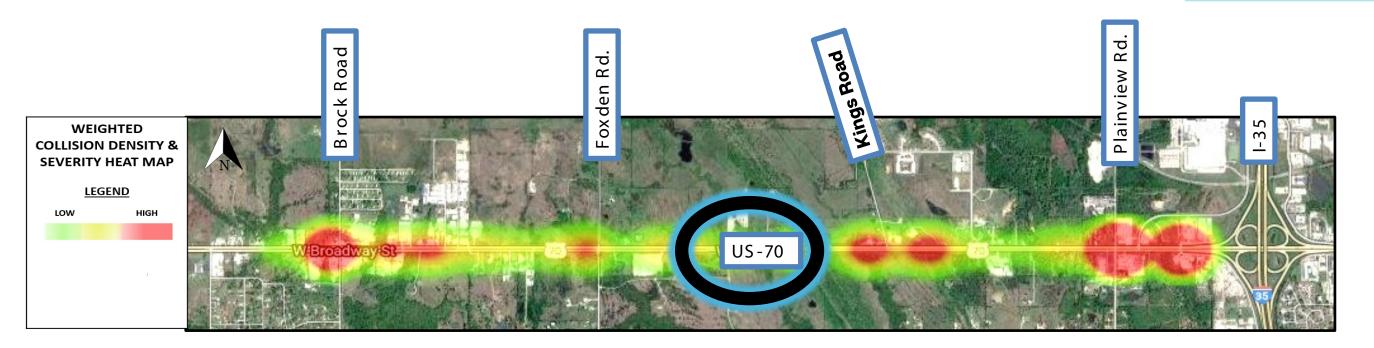


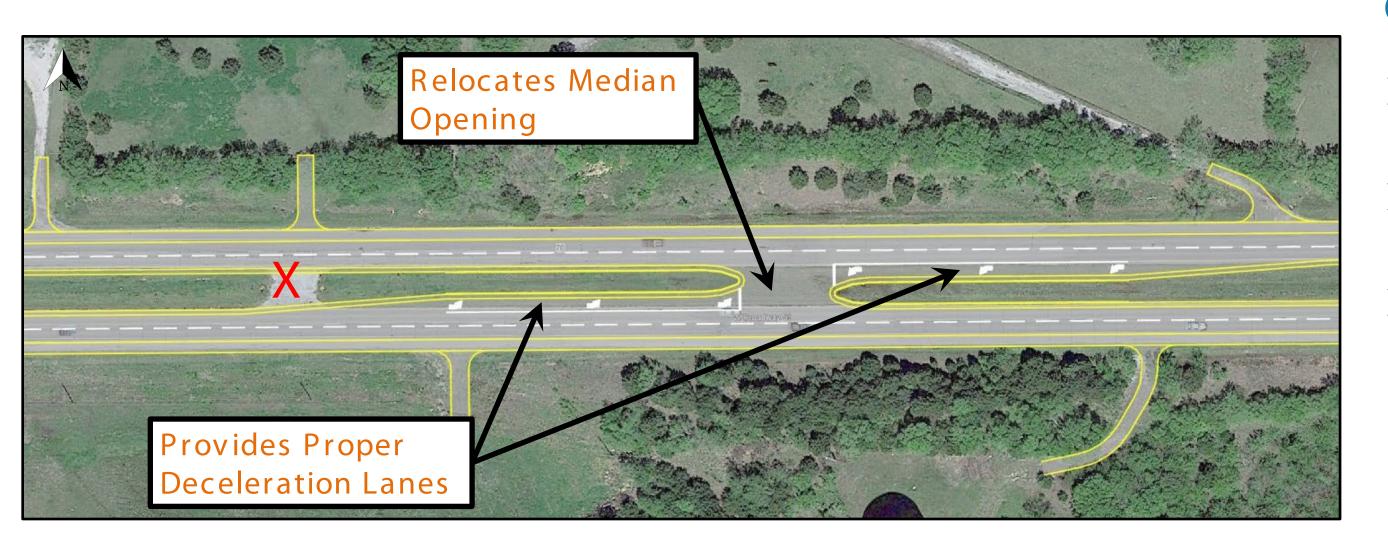












# **Safety Improvements**

## **Typical U-Turn Median Opening**

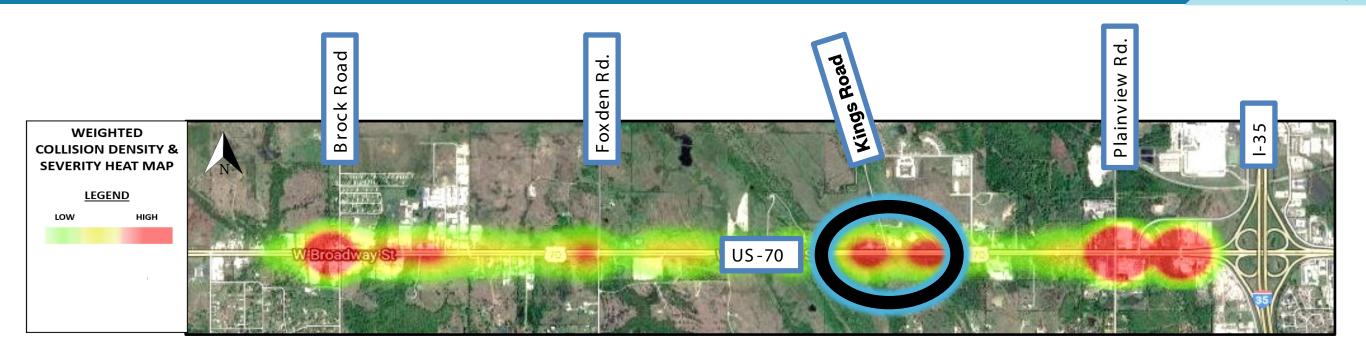
- Eliminate Unnecessary Median Openings
- Relocate Median Openings for Sight-Distance
- Provide Adequate Deceleration Left-Turn Lanes











## **Safety Improvements**

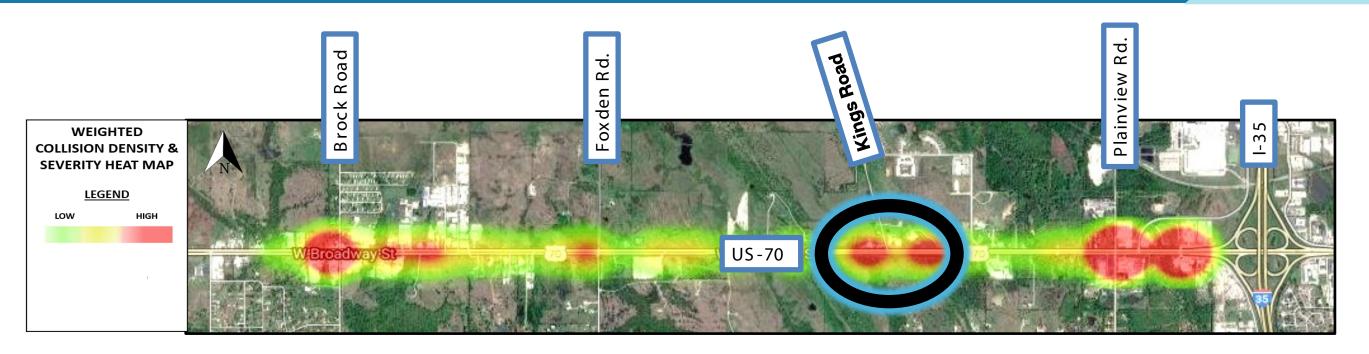




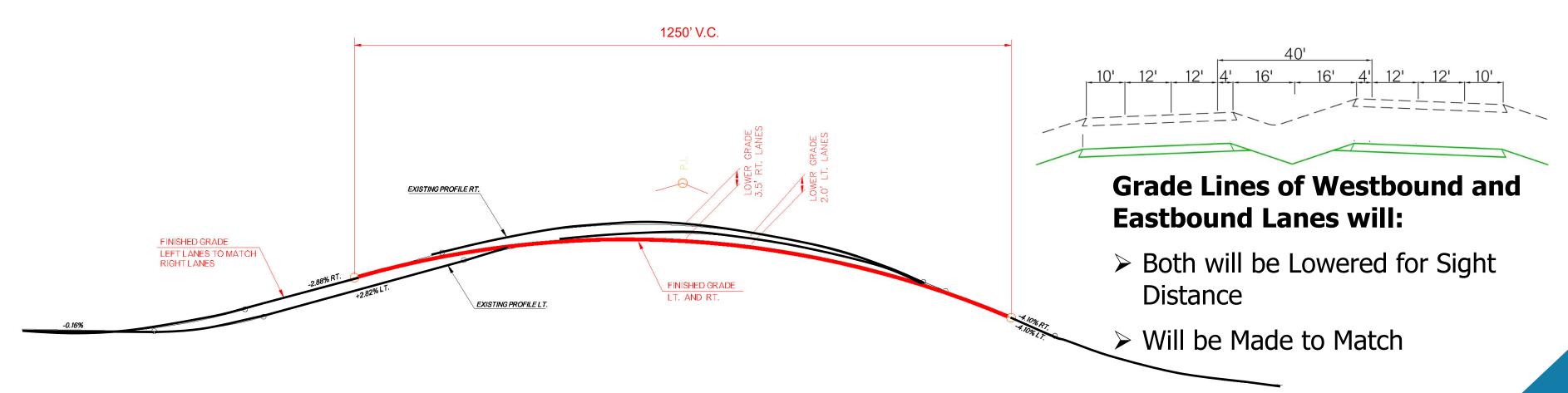








## Safety Improvements



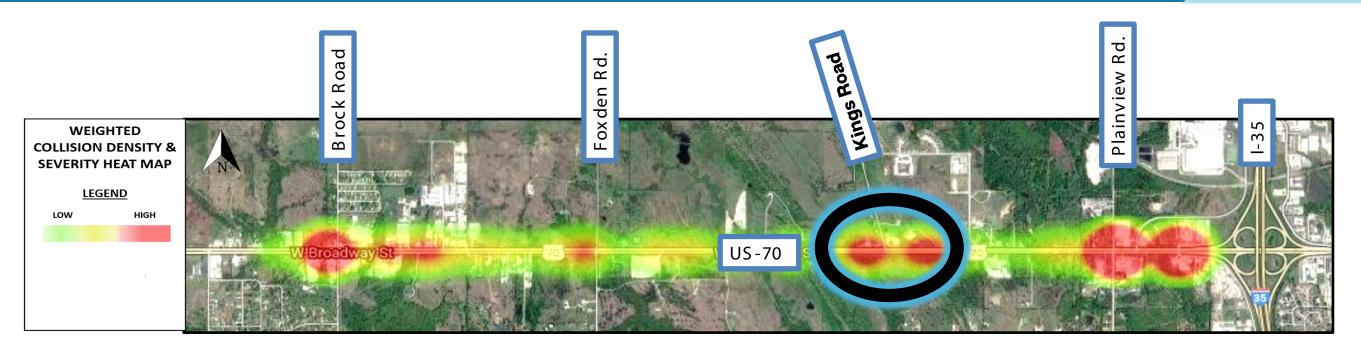
#### **Grade Adjustments for Improved Safety**



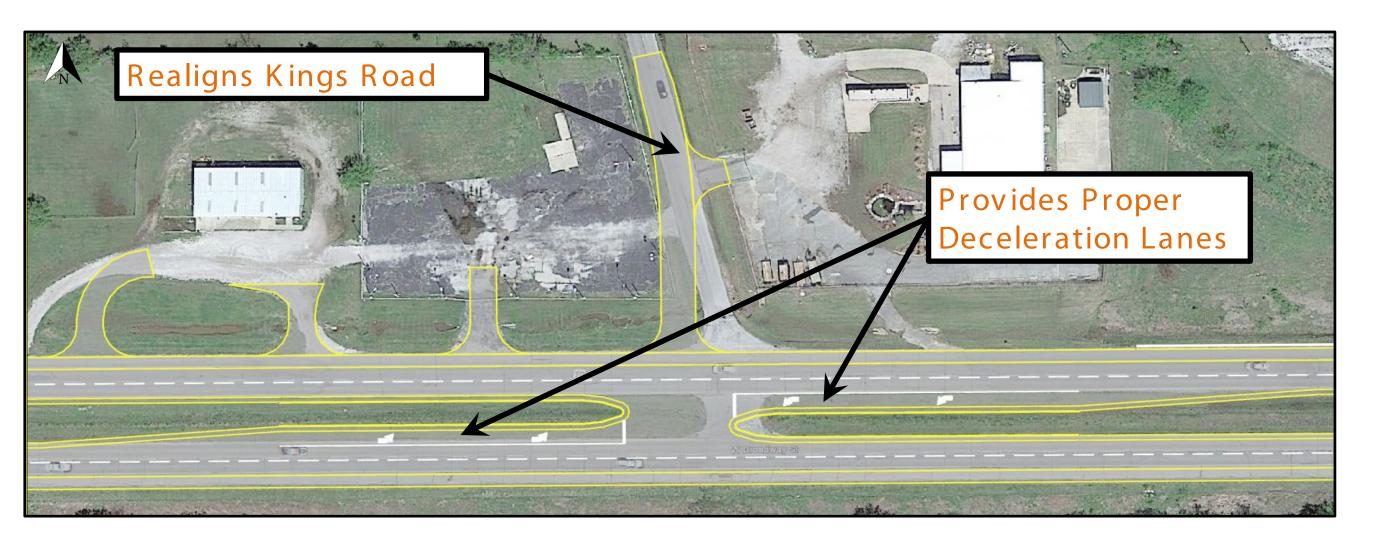








# **Safety Improvements**



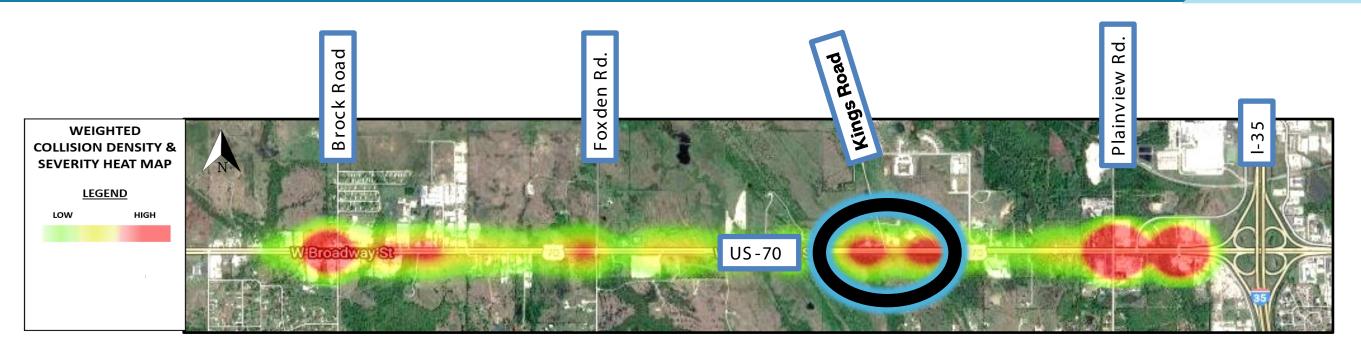
Realigns Kings Road for a "Square" intersection











## **Safety Improvements**



#### **Safety Issues**

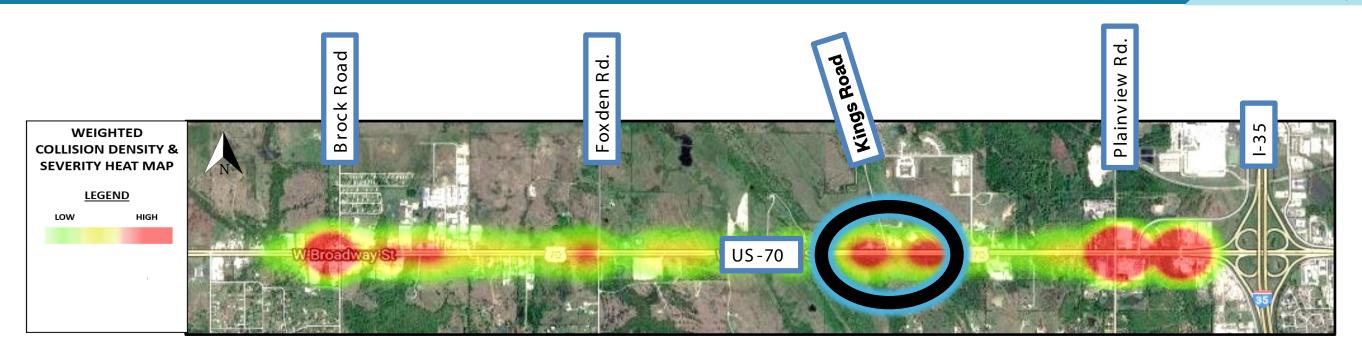
- > Fixed Objects in Clear Zone
- > Steep Backslope in Clear Zone
- ➤ Limited ROW with Church Building in Close Proximity on the North Side of US-70



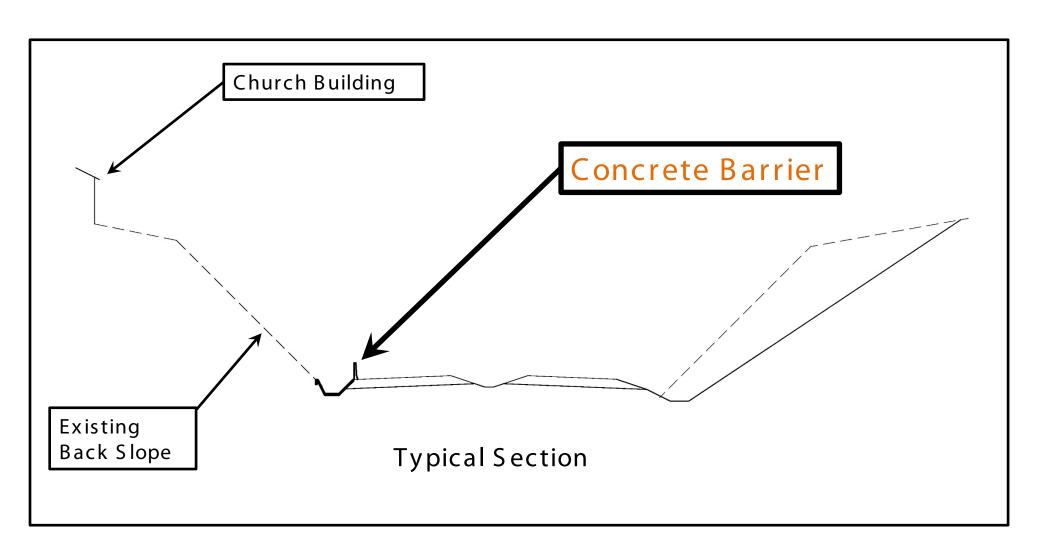








## **Safety Improvements**



#### **Adds Concrete Barrier**

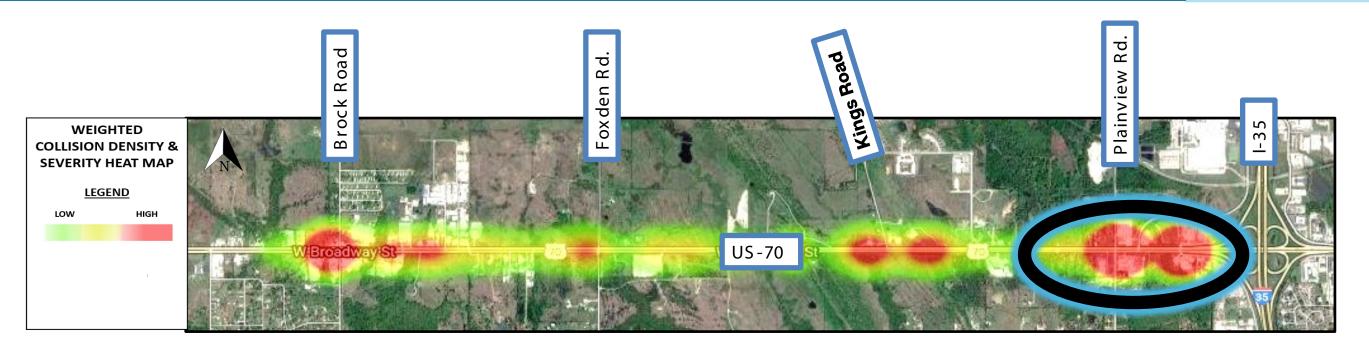
- Protects Traffic from Steep Backslopes and Fixed Objects
- Improves Drainage
- Avoids the Church Building











## **Safety Improvements**



#### **Safety Issues**

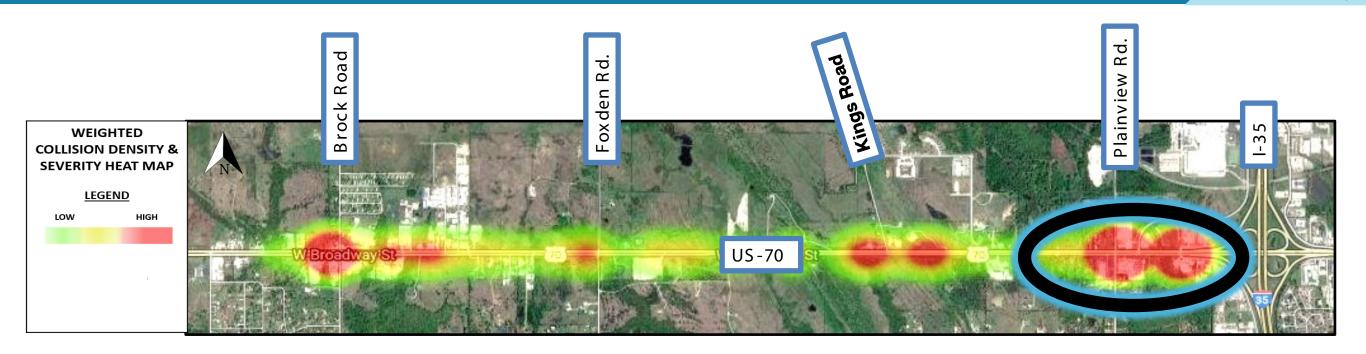
- Need to Improve:
  - Stopping Sight-Distance from West
  - Crest Vertical Curves in Both Directions of Travel
  - Sag Vertical Curve in Westbound Lanes
  - Differential Grades within Intersection



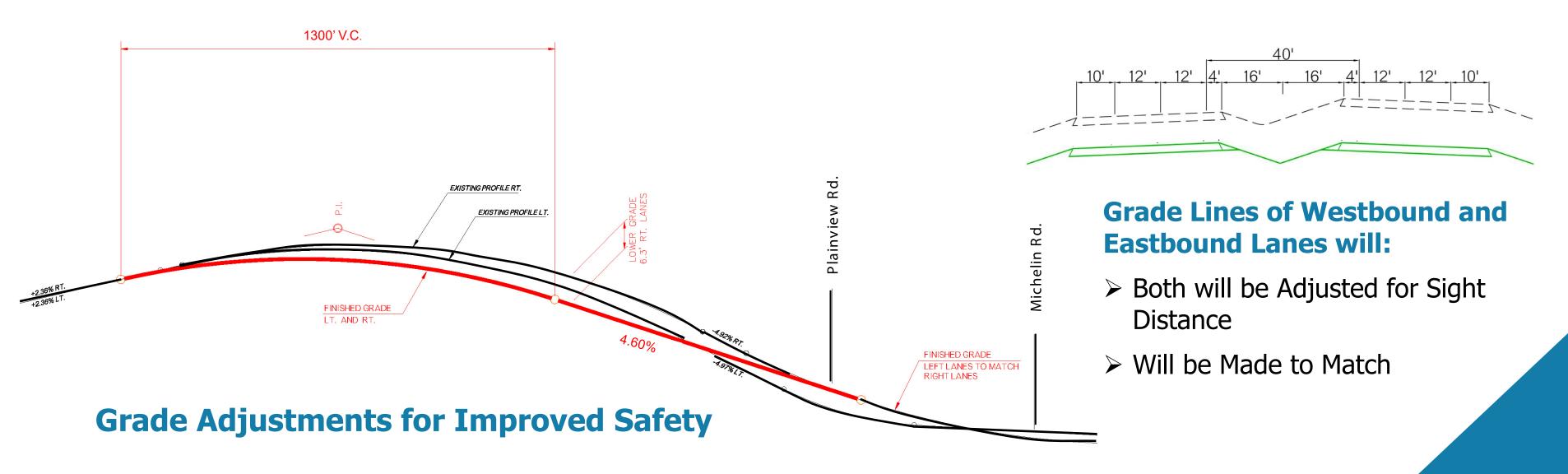








## **Safety Improvements**

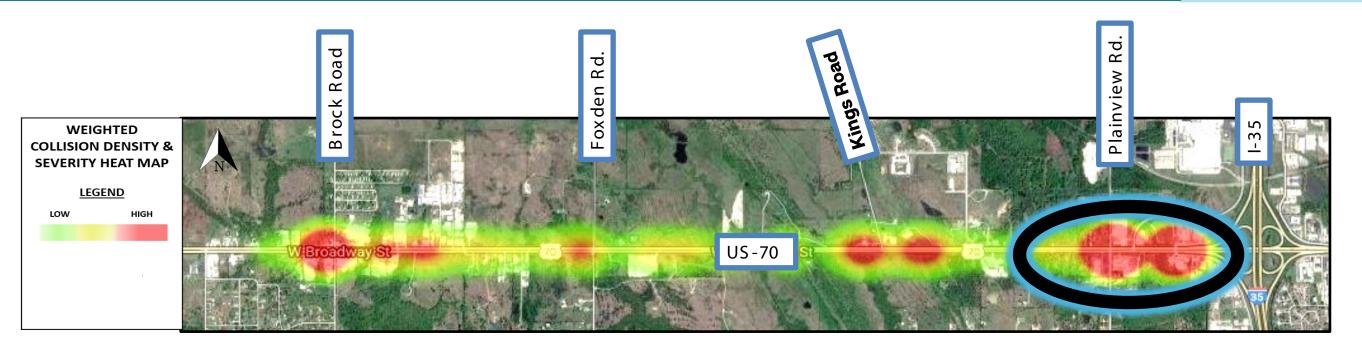




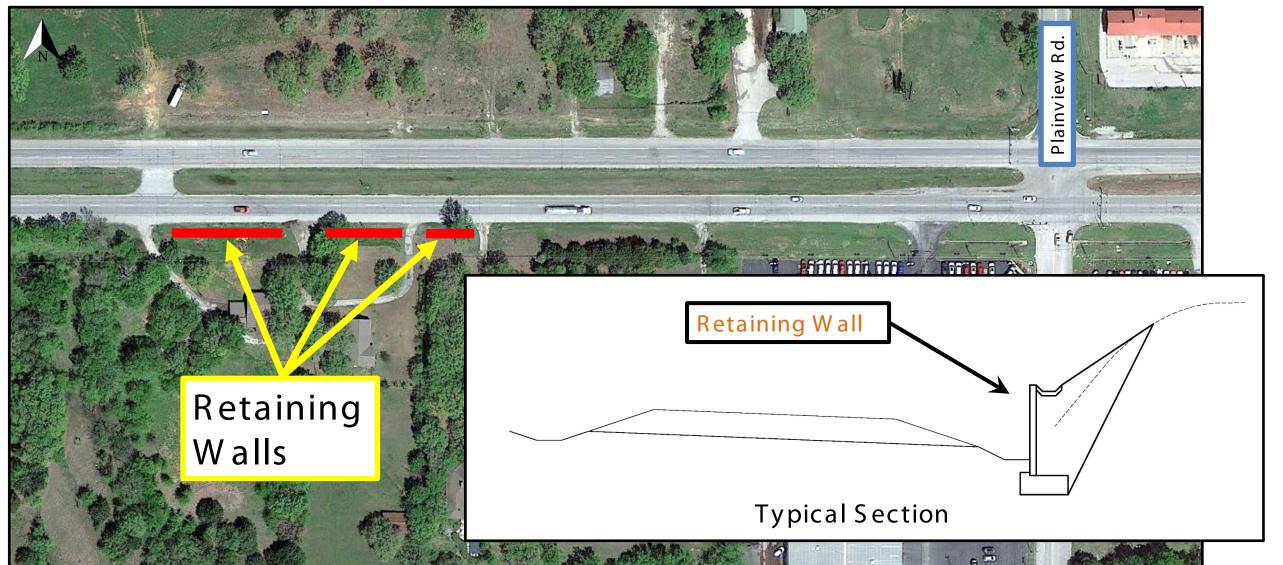








# **Safety Improvements**



#### **Grade Adjustments**

Requires Retaining Walls to Minimize Additional ROW

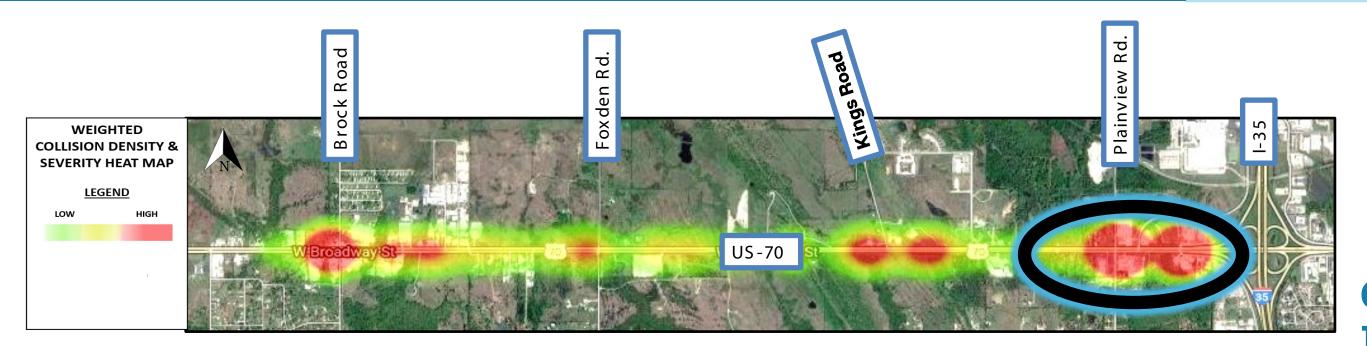


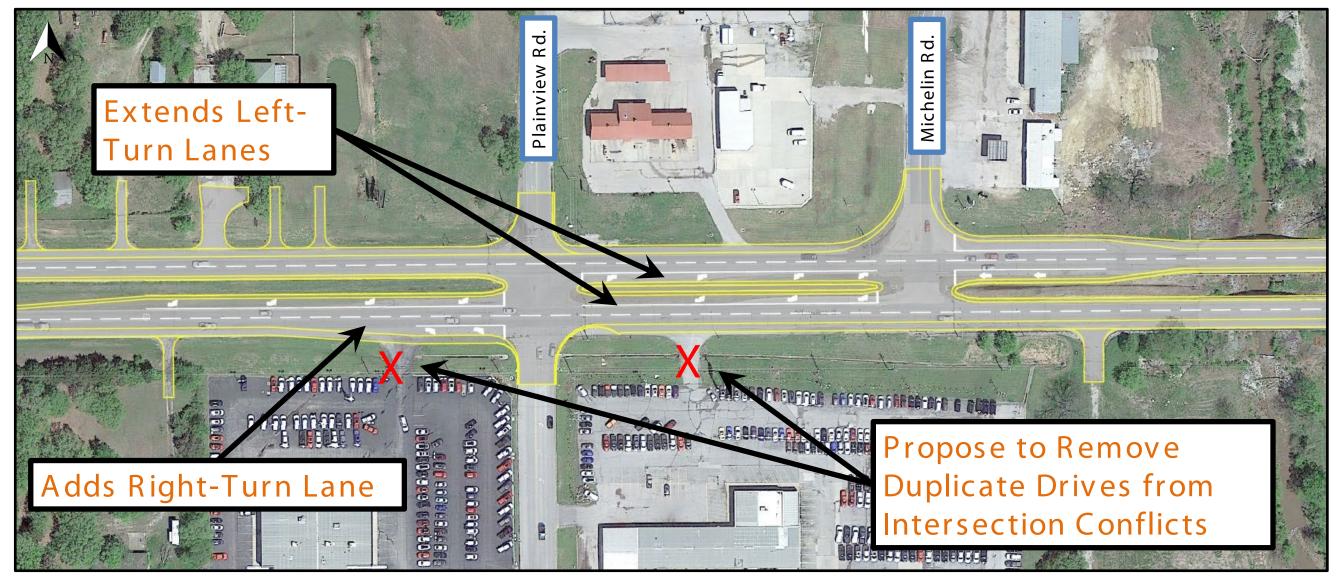












## **Safety Improvements**

## Operational Improvements

- Extended Left-Turn Lane through Plainview and Michelin Roads
- Added Eastbound Right-Turn Lane to Plainview Road
- Signalized Intersections will be Synchronized at both Plainview and Michelin Roads
- Proposed Removal of Duplicate, Unsafe Drives