



Maguire  
WARRENSBURG, MO  
Street

# Maguire Street

Highway 50 Interchange  
Preliminary Design Concepts

City of Warrensburg



# HDR Staff



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Project Manager



Simon Sun  
Roadway



Matt Spencer  
Roadway



# Project Purpose

# Project Phasing

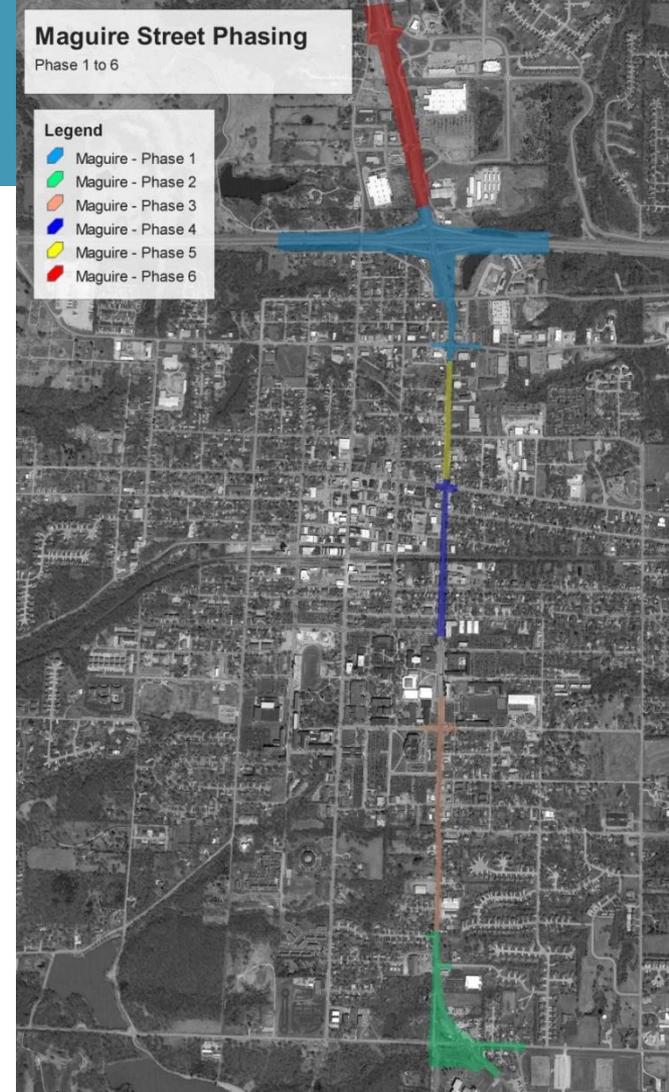
- Phase 1
  - Highway 50 Interchange to Young Avenue
- Phase 2
  - Meadow Lane to Route DD
  - including trail connection and improvements along Route DD to Marr Drive
- Phase 3
  - Clark Street to Meadow Lane
- Phase 4
  - Gay Street to South Street
- Phase 5
  - Young Avenue to Gay Street
- Phase 6
  - Hawthorne Boulevard to Highway 50 Interchange

## Maguire Street Phasing

Phase 1 to 6

### Legend

- Maguire - Phase 1
- Maguire - Phase 2
- Maguire - Phase 3
- Maguire - Phase 4
- Maguire - Phase 5
- Maguire - Phase 6



# Phase 1

- Initial Phase

- Survey
- Interchange Geometrics - 3 Concepts
- Bridge Concepts
- Coordinate With MoDOT
- Traffic Analysis
- Evaluate Right Of Way Needs
- Develop Cost Estimate

# Existing Interchange

- Traditional Diamond Interchange
- Closely Spaced Signals
- Left Turn Storage Needs
- Existing Vertical Clearance Issues
- Existing Shallow Structure
- Existing Voided Slab
  - Difficult Widening
  - Difficult Staged Demolition



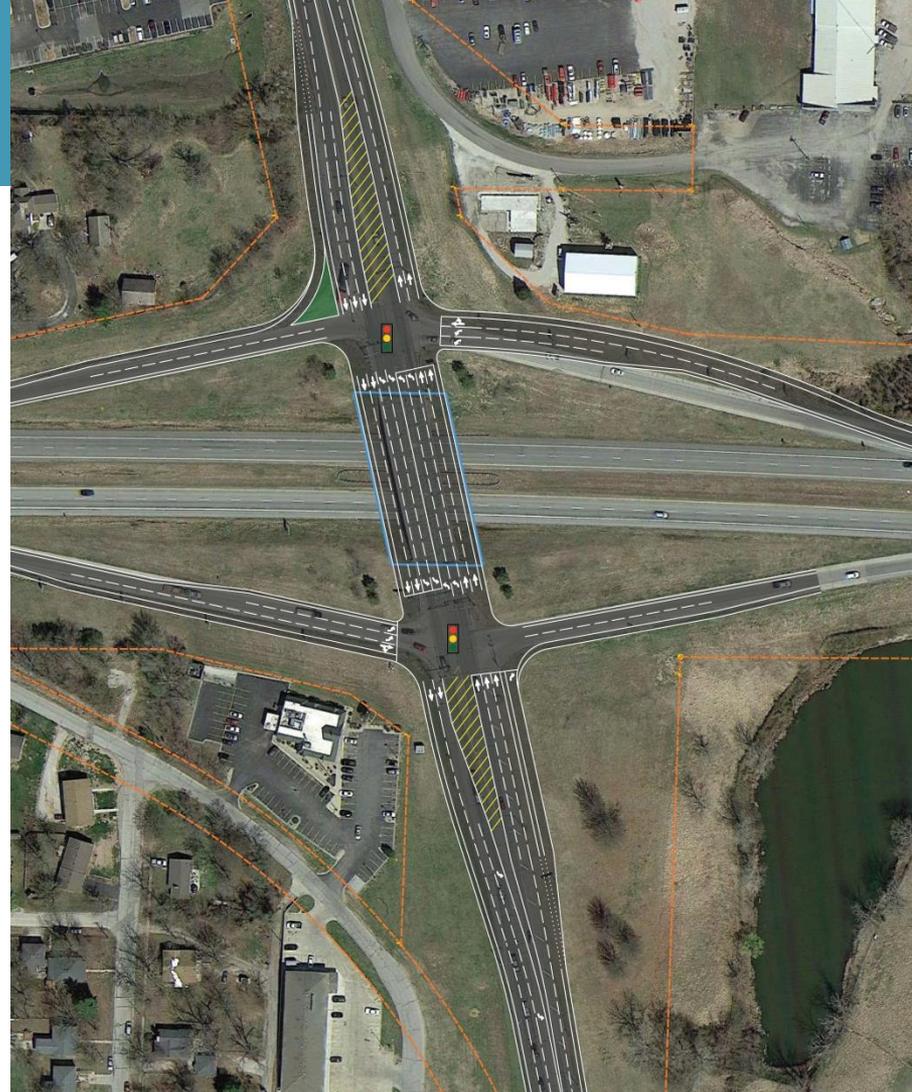
# Tight Diamond

## ■ Advantages

- Matches Existing
- Ease of Construction

## ■ Disadvantages

- Higher Cost (Bridge)
- Staged Construction



# Single Point

## ■ Advantages

- Reduced Parcel Impacts
- 1 Signal
- Increased Distance to Adjacent Intersections
- Increases Left-Turn Capacity

## ■ Disadvantages

- Higher Cost (Bridge)
- Staged Construction
- Extremely Difficult to Widen



# Diverging Diamond

## ■ Advantages

- Increases Left-Turn Capacity
- Reduction in Conflict Points Increases Safety
- Constructability
- Pedestrian Access

## ■ Disadvantages

- Driver Familiarity
- Impacts on High Through Volumes



# Alternatives Overlay

- TUDI, SPUI & DDI Overlay
- Visualize Worst Case
- Establish Grading Limits
- Retaining Wall vs. Right Of Way Analysis



# Maguire St. Business Enhancement Grant Program

- Build on success of Downtown Façade Grant Program
- \$40,000 in City's budget for Maguire St. Business Enhancement Grants
- Encourage re-investment in buildings, signs, parking lots, and sidewalks along Maguire St.
- Seeking committee members to help set up the program guidelines and application process