



# Route N Study

## Technical Advisory Group (TAG)

### Meeting #3

November 20, 2019





# Agenda

- Introductions
- Study Overview
- Conceptual Alternatives
- Reasonable Alternatives
- Identification of the Tentative Preferred Alternative
- Next Steps
- Questions & Discussion



# Study Overview



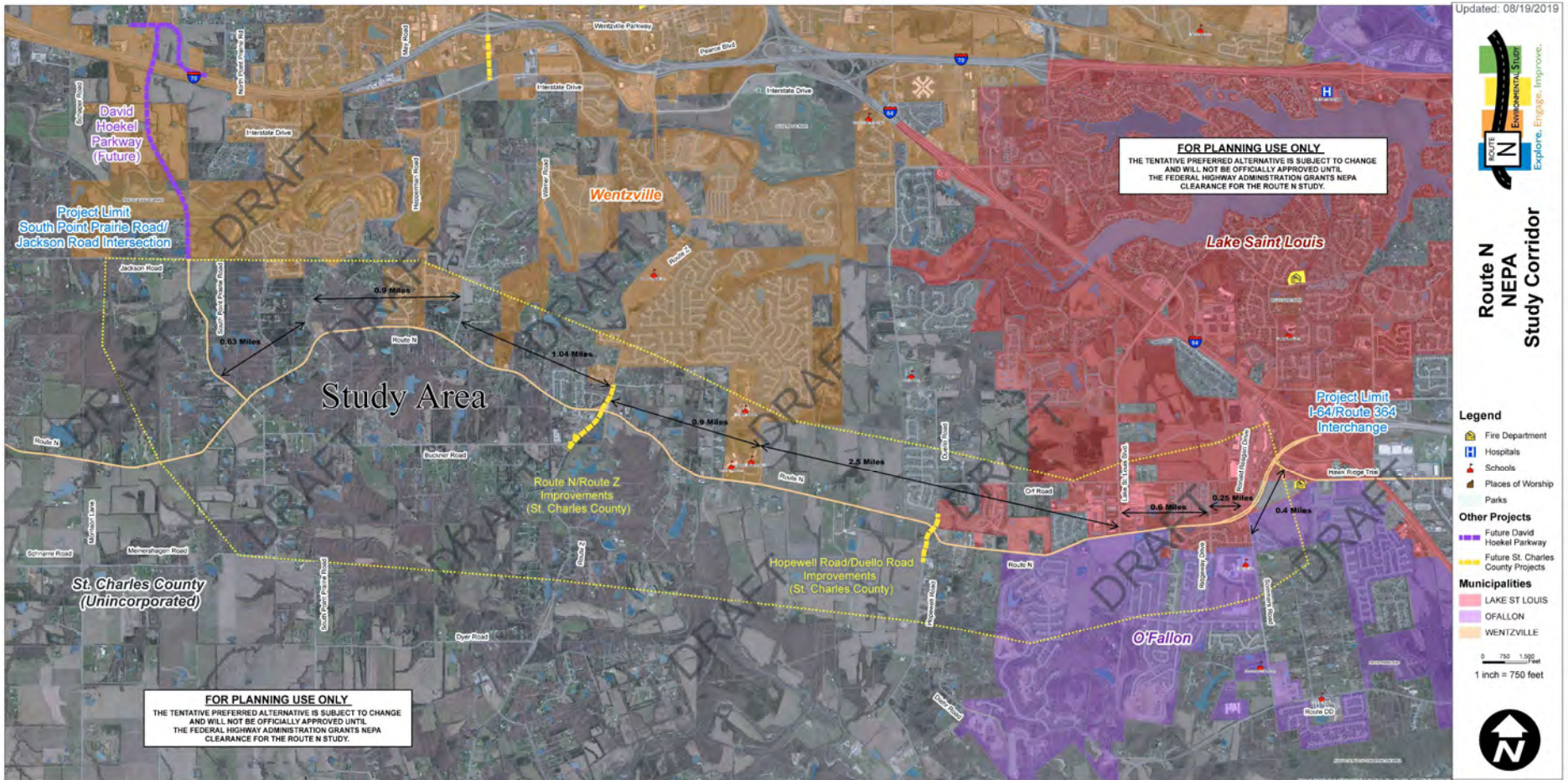


# Route N NEPA Study

- Limits
  - From the South Point Prairie Road/Jackson Road intersection east to the I-64/Route 364 interchange
- Co-Lead Agencies – MoDOT and FHWA
- Transportation Corridor Improvement Group
  - MoDOT
  - St. Charles County
    - Partnering with MoDOT
    - Elevated Route N to a regional long-range plan priority
  - East-West Gateway Council of Governments (MPO)
    - Partnering with MoDOT
    - Ensuring the study supports the regional vision



# Study Area





# Study Purpose

The Purpose (Goal) of the Route N NEPA study is to investigate and identify improvements intended to develop a safe and efficient network between the South Point Prairie Road/Jackson Road intersection and the I-64/Route 364 interchange



# Study Need

Overall, the need elements of the Route N NEPA Study are to:

- Improve access and connectivity
  - Need to provide access to important study area resources
  - Need to address deficiencies within the existing roadways
  - Need to improve connectivity through the study area
- Reduce congestion and delay
  - Need to address inadequate capacity
  - Need to address poorly operating intersections and driveways
  - Need to provide appropriate access management opportunities

These need elements served as the primary evaluation factors to determine the Reasonable Alternatives





# Overall Study Progress

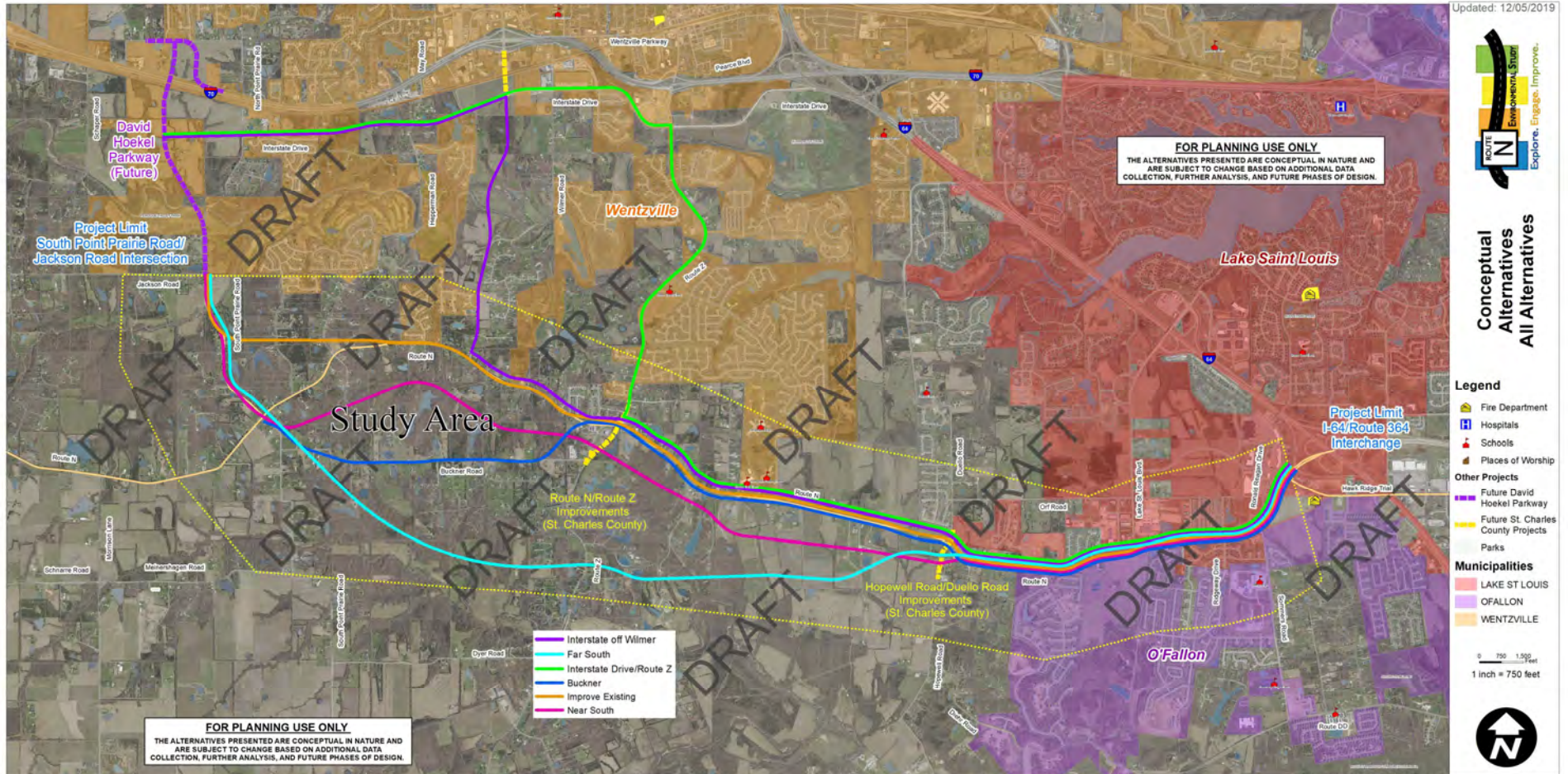
- Stakeholder input about project need
- Public Meeting #1
- Purpose and Need
  - Draft Purpose and Need vetted with public and FHWA
- Develop and Screen Conceptual Alternatives
- Identify Reasonable Alternatives
- Public Meeting #2
- Quantify and assess impacts of the Reasonable Alternatives
- Determine Tentative Preferred Alternative





# Conceptual Alternatives

# Conceptual Alternatives



# Reasonable Alternatives



# No Build Alternative

- The No Build Alternative is always carried through NEPA evaluations
- If no alternatives can be found that minimally satisfy a study's purpose and need, the Tentative Preferred Alternative would be the No Build Alternative
- The No Build Alternative assumes no improvements outside of routine maintenance



# Roadway Configuration of the Reasonable Alternatives

- Six lanes from Route 364 to Sommers Road
- Four lanes from Sommers Road to:
  - Hepperman Road – Improve Existing
  - Route N/South Point Prairie intersection – Buckner Road and Near South
- Two lanes from:
  - Hepperman Road to Jackson Road – Improve Existing
  - Route N/South Point Prairie intersection to Jackson Road – Buckner Road and Near South Alternative

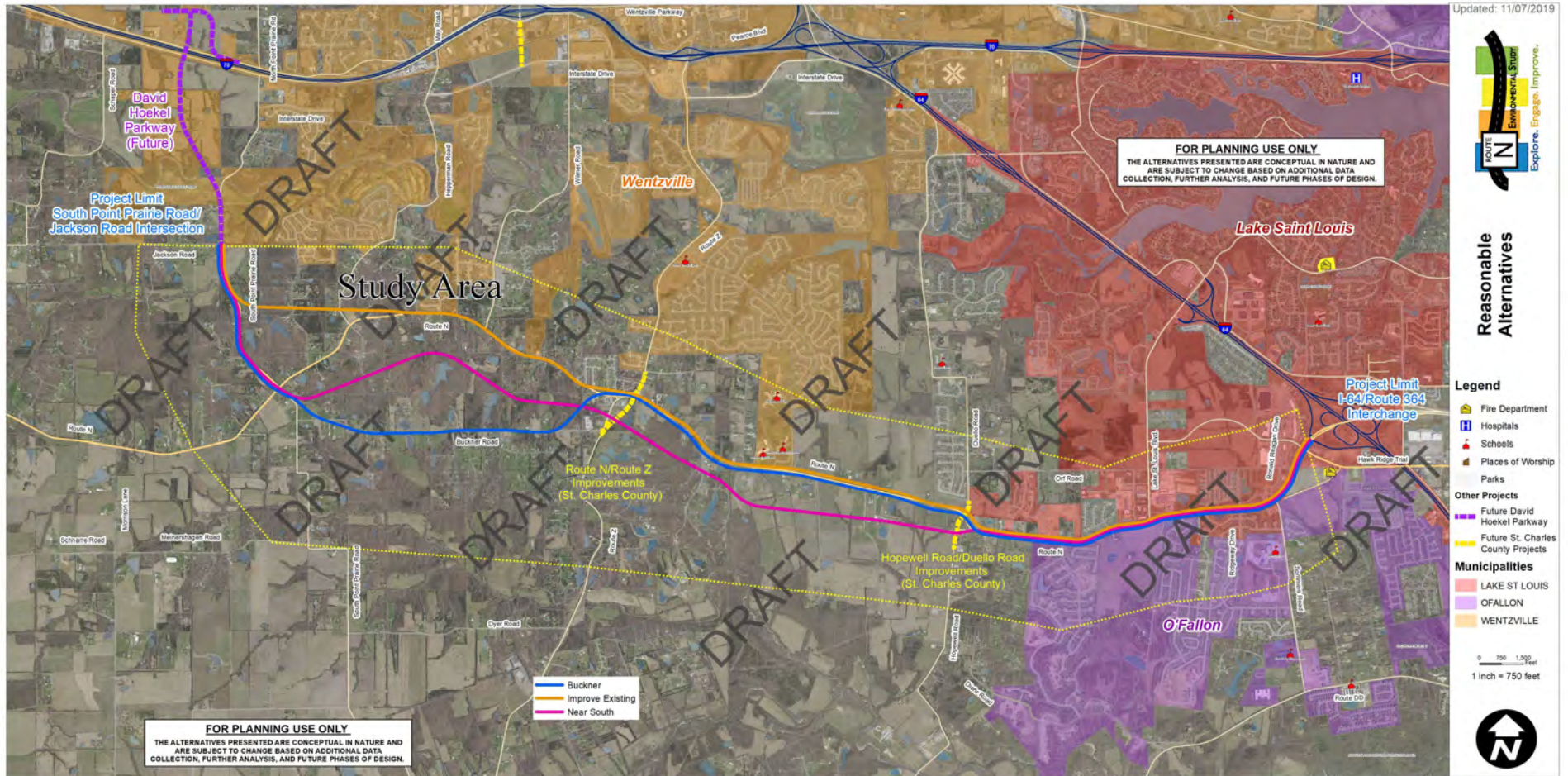


# Roadway Configuration of the Reasonable Alternatives

- Paved shoulders
- Center median/turn lane
- Sidewalks
  - Requires local cost participation
- Stormwater system
  - Curb and gutter from Route 364 to Route Z
    - Improve Existing and Buckner Road Alternatives
  - Curb and gutter from Route 364 to Hopewell/Duello
    - Near South Alternative
  - Drainage ditches west of these locations



# Reasonable Alternatives



# Identification of the Tentative Preferred Alternative



# NEPA “Umbrella”

## Other laws have established interlocking or overlapping requirements

- Solid Waste Disposal Act
- Resource Conservation and Recovery Act of 1976
- Comprehensive Environmental Response, Compensation and Liability Act
- Emergency Planning and Community Right to Know Act of 1986
- **National Historic Preservation Act**
- Highway Noise Standards
- State Noise Standard
- Public Hearing Requirements
- Section 9 - Bridge Permits
- **Section 7, Endangered Species Act, (FWS)**
- **Archaeological and Historic Preservation Act**
- **Archaeological Resources Protection Act**
- Title VI of Civil Rights Act of 1964
- **Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970**
- Americans with Disabilities Act
- **Executive Order 12898 (Environmental Justice)**
- **Section 4(f) of USDOT Act (49 USC 303)**
- Clean Air Act
- Safe Water Drinking Act
- Farmland Protection Policy Act
- Section 6(f) of the Land and Water Conservation Fund Act (LWCFA).
- Rivers and Harbors Act, Section 10 (COE, USCG)
- **Clean Water Act, Sections 401 & 404 – wetlands (States, COE)**
- Executive Order 11988, Floodplains



# Impacts of the Reasonable Alternatives

- Reasonable Alternatives were evaluated for:
  - Engineering impacts
  - Community impacts
  - Environmental impacts
  - Public input



# Engineering Impacts – Cost

- Costs in 2019 dollars

Cost Item	Improve Existing	Buckner Road	Near South
Right of Way	\$74,200,000	\$68,500,000	\$58,500,000
Construction	\$93,000,000	\$84,000,000	\$88,000,000
<b>TOTAL</b>	<b>\$167,200,000</b>	<b>\$152,500,000</b>	<b>\$146,500,000</b>





# Engineering Impacts – Land Acquisition

Impact (acres)	Improve Existing	Buckner Road	Near South
Residential	98	76	84
Agriculture	101	128	174
Commercial	10	11	5
Industrial	< 1	< 1	< 0
Institutional	12	11	9
<b>TOTAL</b>	<b>221</b>	<b>226</b>	<b>272</b>

Parcels Impacted	Improve Existing	Buckner Road	Near South
Number of Parcels	307	295	238





# Engineering Impacts – Construction and Maintenance of Traffic

- **Improve Existing Alternative**
  - Follows 6.7 miles of existing Route N corridor
  - Requires work along existing alignment, however, very little of the existing pavement may be used
- **Buckner Road Alternative**
  - Follows 5.2 miles of existing Route N corridor
  - Approximately two miles of construction separate from existing Route N
- **Near South Alternative**
  - Follows 2.4 miles of existing Route N corridor
  - Approximately five miles of construction separate from existing Route N



# Engineering Impacts – Utilities

- Similar utility impacts
- The Near South Alternative requires the relocation of the cell tower at Hopewell Road
- No other extraordinary utility impacts are expected





# Engineering Impacts – Future Traffic Operation Impacts

- Level of Service (LOS) is defined by average delay for all vehicles traveling through an intersection
  - A – F letter grades are assigned
- Of the 14 main intersections along existing Route N and Buckner Road, 6 operate at LOS F in 2018
- Under the No Build scenario, eight of these intersections will operate at LOS F by the design year of 2045
- Intersection LOS for the Reasonable Alternatives:

	Improve Existing	Buckner Road	Near South
Number of LOS E Intersections	4	3	4
Number of LOS F Intersections	0	0	0





# Community Impacts – Acquisitions

Property Acquisitions	Improve Existing	Buckner Road	Near South	No Build
Buildings	Residences – 67 Businesses – 2 Institutional – 1 Secondary Buildings – 29 <b>TOTAL: 99</b>	Residences – 44 Businesses – 2 Institutional – 1 Secondary Buildings – 16 <b>TOTAL: 63</b>	Residences – 37 Businesses – 2 Institutional – 2 Secondary Buildings – 14 <b>TOTAL: 55</b>	None
Acres	221	226	272	
Parcels	307	295	238	

- Business impacts are Bright Start Academy and Plaza Tire Service (all alternatives)
- Institutional impacts are Wentzville Church of God (all alternatives) and St. Charles County Ambulance District Building (Near South)







# Community Impacts – Travel Impacts

Impact	Improve Existing	Buckner Road	Near South	No Build
Overall Travel	<b>Pros:</b> Shortest distance <b>Cons:</b> Maintains existing number of intersections	<b>Pros:</b> Fewer Minor road intersections <b>Cons:</b> Places Route N traffic onto Buckner Road	<b>Pros:</b> Fewer minor road intersections <b>Cons:</b> Much of the alternative on new R/W	Increasing delays expected
Driveways Affected	92	73	37	104
At-Grade Intersections	39	29	27	39
Additional Signalized Intersections	9	8	10*	0

- Signalized intersections include ongoing signalization at Route Z and Hopewell Road/Duello Road intersections

\* Would require signals at Near South/Route Z creating two closely spaced signalized intersections





# Community Impacts – Consistency with Planning

Planning Document	Planning Goals	Improve Existing	Buckner Road	Near South	No Build
St. Charles County Land Use Plan	<ol style="list-style-type: none"> <li>1) Provide efficient movements</li> <li>2) Ensure adequate roads</li> <li>3) Reduce traffic in residential areas</li> </ol>	Pros: Maintains existing movements, roadways, and traffic in residential areas	Pros: <b>Efficient movements and adequate roadways</b> Cons: Changes function of Buckner Road	Pros: <b>Efficient movements and adequate roadways</b> Cons: Increases traffic in residential areas	Maintains existing configuration
St. Charles County Thoroughfare Plan	<ol style="list-style-type: none"> <li>1) Urban Service Areas</li> <li>2) Activity Centers</li> <li>3) Mixed use Commercial Activity Centers</li> </ol>	Improves existing configuration	<b>Configuration depicted in Thoroughfare Plan</b>	Bypasses Route N/Route Z Regional Activity Center	Maintains existing configuration
Connected 2045 (East-West Gateway Long Range Plan)	Investment Plan Compliance	<b>Improves existing regional roadway network</b>	Changes to Buckner Road have the potential for a minor increase in development	New alignment has the potential for major increase in development	Maintains existing regional roadway network
St. Charles County Transportation Improvement Plan (TIP)	Impact on projects included in the St. Charles County TIP	No impact	No impact	No impact	No impact



# Environmental Impacts – Terrestrial Habitat

Impact (acres)	Improve Existing	Buckner Road	Near South	No Build
Developed/Urban	48	38	45	None
Water	5	5	8	
Agriculture	13	19	26	
Grasslands	79	91	84	
Evergreen	13	11	12	
Deciduous	54	54	85	
Barren	9	8	12	
Total (not including impacts within existing R/W)	221	226	272	





# Environmental Impacts – Cultural Resources

Architecture addresses impacts to properties on, or eligible to be on, the National Register of Historic Places (NRHP)

Impact	Improve Existing	Buckner Road	Near South	No Build
Buildings or Archaeology on the NRHP	0	0	0	0
Buildings eligible for the NRHP	0	0	0	0
Archaeology sites eligible for the NRHP	0	0	0	0

- *Two cemeteries were encountered, all alternatives avoid impacts to both cemeteries*





# Environmental Impacts – Agricultural, Noise, and Visual

Impact	Improve Existing	Buckner Road	Near South	No Build
Farm Lot Bi-section	1	2	8	0
Number of Traffic Noise Impacts	11	10	10	13
Visual Impacts	Largely maintains existing views	Changes a rural/low volume road to a more suburban/high volume configuration	Places a suburban/high volume road where roads don't exist	None





# Environmental Impacts – Floodplains, Water Crossings, and Wetlands

Impact	Improve Existing	Buckner Road	Near South	No Build
Floodplain Encroachments	2 – Sam’s Creek and Oday Creek	2 – Sam’s Creek and Oday Creek	2 – Sam’s Creek and Oday Creek	None
Waterway Crossings	3 – Peruque Creek 1 – Dardenne Creek	3 – Peruque Creek 1 – Dardenne Creek	3 – Peruque Creek 1 – Dardenne Creek	
Wetlands Affected	0.7 acres	1.1 acres	1.4 acres	



# Environmental Impacts – Threatened and Endangered Species

- Federally listed species are limited to the Gray Bat, the Indiana Bat, and Northern Long-eared Bat
  - Impacts to the Gray Bat are not expected
  - Indiana Bats and Northern Long-eared Bats use barks of trees for summer roosting
    - Impacts to these species may occur
    - Mitigation to include seasonal restrictions on tree clearing

Impact	Improve Existing	Buckner Road	Near South	No Build
Likelihood of Impacts to Indian Bats and Northern Long-eared Bats	Moderate amount of potential habitat encroachment	Least amount of potential habitat encroachment	Highest amount of potential habitat encroachment	None



# Environmental Impacts – Environmental Justice

- Address disproportionately high and adverse human health or environmental impacts to minority and low-income communities or populations
  - Executive Order 12898 signed on February 11, 1994
- Ensure full and fair participation by all potentially affected communities in decision-making
- No disproportionate impacts to minority or low income populations are expected







# Public Input on Alternatives

- Stakeholder Interviews
  - Concerns with lack of shoulders, lack of left turn lanes, long delays, Route N/Route Z intersection configuration, rapid residential growth, and inadequate roadway geometries
- Community Advisory Group (CAG)
  - Comprised of residents, school representatives, emergency responders, and businesses
  - CAG members echoed concerns from the stakeholder interviews and also noted a need for safe bike/pedestrian accommodations
- Technical Advisory Group (TAG)
  - Comprised of technical members from MoDOT, St. Charles County, East-West Gateway, and the Cities of Wentzville, Lake St. Louis, and O'Fallon
  - Provided general comments and discussion of the project issues, Conceptual Alternatives, and Reasonable Alternatives



# Public Input on Alternatives

- Public Involvement Meetings (PIMs)
  - Each PIM preceded by an elected officials briefing to allow one-on-one discussion between the study team and elected officials
  - PIM 1 – 70 attendees
    - Common themes included lack of shoulders, lack or turn lanes, speeding, ability to turn onto/off Route N, blind spots, congestion, and lack of safe bike/pedestrian accommodations
  - PIM 2 – 130 attendees
    - Review of Purpose and Need, presented the Conceptual Alternatives, Purpose and Need screening of the Conceptual Alternatives, and identification of the Reasonable Alternatives
    - Attendees stated a preference for:
      - Improve Existing Alternative (49%)
      - Near South Alternative (24%)
      - Buckner Road Alternative (17%)
      - The No Build received a 7% favorable rating
      - These ratings were related to how stakeholders felt each Reasonable Alternative addressed Purpose and Need and was solicited without impact information



# Public Input on Alternatives

- MetroQuest Survey
  - MetroQuest survey was conducted from May 20, 2019 through June 10, 2019
  - Over 3,000 individual respondents
  - Stakeholders strongly favored wider paved shoulders, open drainage over enclosed drainage, adding sidewalks, and allowing left turns at all locations
  - Stakeholders stated preferences for separating through traffic from local traffic, improving access management, and using existing roadways where possible
  - Minimizing building impacts, costs, and land impacts were cited as lower priorities
  - It is important to note that in many cases, the preferred trade offs conflict with preferred priorities
  - All three Reasonable Alternatives received average ratings within 4% of each other





# Recent Public Involvement

- Over the past two months - five community events
- Wentzville Fall Festival
  - September 20<sup>th</sup> from 6:00 pm – 10:30 pm
  - September 21<sup>st</sup> from noon – 10:00 pm
  - Collected 21 emails and informed at least 100 festival goers about the study
- Lake Saint Louis Farmers and Artists Market
  - October 5<sup>th</sup> and 12<sup>th</sup> from 8:00 am – noon
  - Hourly announcements to learn of the Route N Study
  - Collected 12 emails and spoke to about 45 attendees
- O'Fallon Food Truck Frenzy
  - October 18<sup>th</sup> from 6:00 pm - 8:30 pm
  - One additional email address and reached five additional attendees
- Route N/Route Z public hearing
  - Over 100 attendees

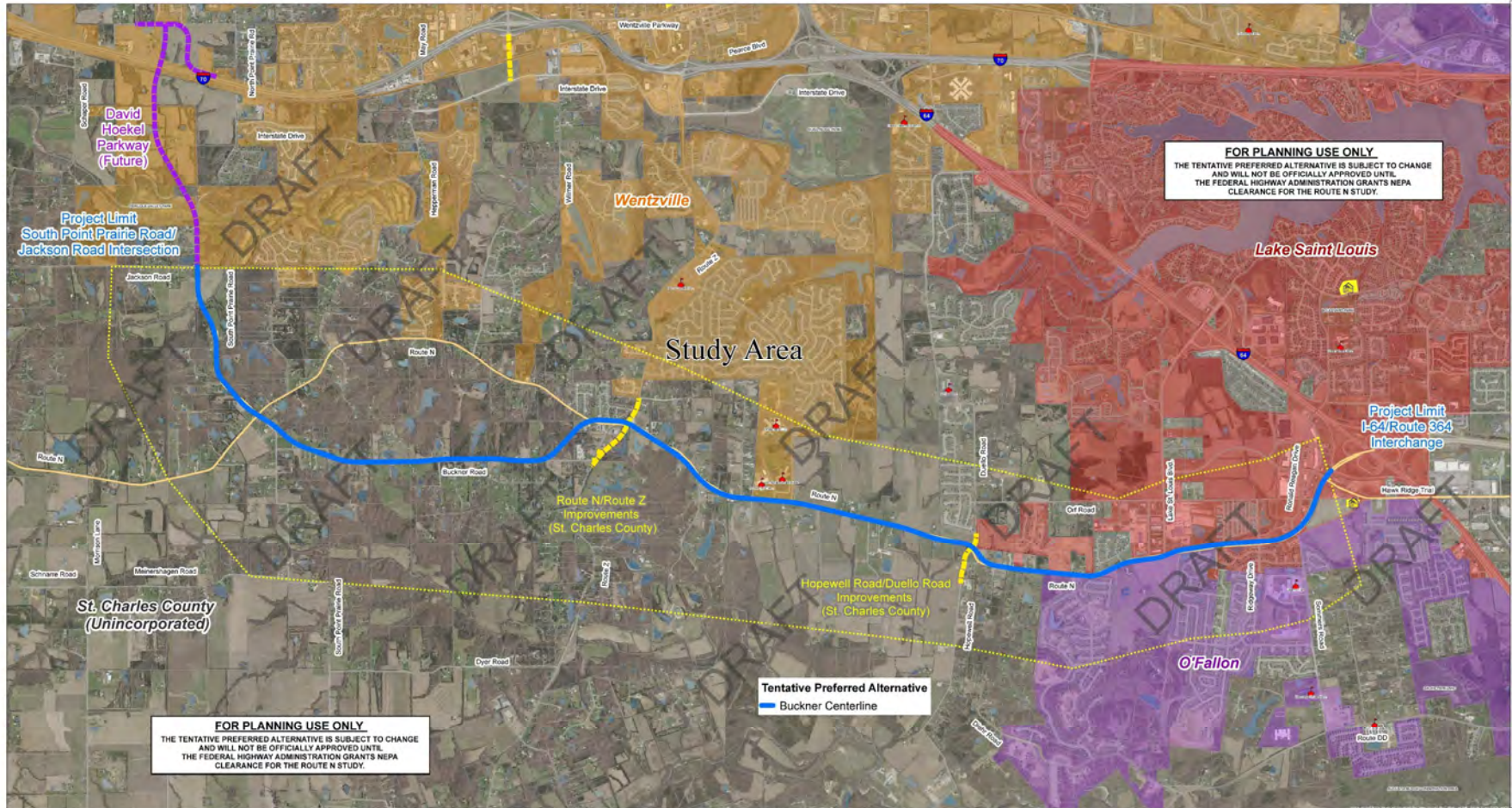




# Identification of the Tentative Preferred Alternative

- Based on the study's Purpose and Need, logical termini, study area, public input, and the analysis of the impacts of the Reasonable Alternatives, a Tentative Preferred Alternative was selected
- The Tentative Preferred Alternative for the Route N NEPA Study is the Buckner Road Alternative

# Tentative Preferred Alternative – Buckner Road



# Next Steps



# Project Schedule

- Approved Environmental Assessment (EA) – December 2019\*
  - Includes an EA comment period – at least 30 days
  - Public hearing conducted during the comment period
- Public Hearing – Anticipated January 2020
  - Public comments on the analysis and decision-making outlined in the EA
  - Comments are accepted in person, via mail, or via email through the end of the comment period
  - All comments received will be included in the project record
  - Substantive comments will be responded to and a Finding of No Significant Impact will be prepared

*\* The project must first be added to East-West Gateway's fiscally constrained Long Range Plan*





# Project Schedule

- Finding of No Significant Impact (FONSI) – Early Spring 2020
  - FONSI summarizes comments received on the EA, responds to substantial comments, and recommends revisions to the EA as appropriate
  - FHWA’s approval of the FONSI signifies the completion of the EA
- Study Complete – Early Spring 2020

## Route N Study Timeline



# Questions and Discussion