

Definition of I-49 Lafayette Connector Refinement Concepts

The CSS Team has assembled and analyzed the input and feedback received from the I-49 Lafayette Connector partner agencies (FHWA, DOTD, APC and LCG), cooperating agencies (e.g., One Acadiana, Downtown Development Authority, 705 Young Professionals Club), CSS committee members, the Lafayette community members at-large (through Community Walkabouts, Neighborhood Meetings and Key stakeholder Interviews), and the LCP Team, to formulate and define the twelve (14) primary thematic refinement concepts for the I-49 Lafayette Connector. These thematic refinements address a variety of community and stakeholder priorities, including improving access to Downtown, improving traffic operations and flow through and near the Downtown area, improving neighborhood connectivity across the corridor, minimizing impacts to adjacent neighborhoods, stimulating neighborhood revitalization and selective redevelopment, and reinforcing and expanding the Downtown's presence as the primary economic activity center of the Acadiana Region. In addition, the CSS Team has also assembled a list of Spot Improvements, which may be applied to any of the thematic alternatives.

In this memorandum, the key thematic refinement concepts have been defined upfront, followed by the spot improvements.

Refinement Concepts - Definitions

- 1A. Base Case (I-49 Lafayette Connector Concept, preliminary engineering concept representation of FEIS Selected Alternative and ROD, 2003-2004)
 - Single Point Urban Interchanges (SPUI) at Johnston and 2nd/3rd Streets
 - RR Crossing Grade Separations at Johnston, Jefferson, and 2nd/3rd Streets
 - 2nd and 3rd Streets realigned to come together at single interchange
 - Johnston Street realigned to straighten curve and accommodate interchange ramps
 - Portion of mainline I-49 on embankment between Johnston and 2nd/3rd Street interchanges
- 1B. Base Case (I-49 Lafayette Connector, 2003-2004) Modified
 - Replace Johnston and 2nd/3rd Street Downtown SPUI Interchanges with Tight Urban Diamond Interchanges (TUDI)
 - Maintain RR Crossing Grade Separations at Johnston and 2nd/3rd Streets
 - Maintain Jefferson Street RR Crossing Grade Separation
 - Portion of mainline I-49 on embankment between Johnston and 2nd/3rd Street interchanges
- 2A. Base Case with Core Area Single Interchange – Johnston Street
 - Remove 2nd/3rd Streets Downtown Interchange
 - Change Johnston Street Downtown Interchange to TUDI
 - Remove RR Crossing Grade Separation at 2nd/3rd Street

- Maintain Jefferson Street RR Crossing Grade Separation
- Evangeline Thruway remains connected to overall frontage road system
- Portion of mainline I-49 on embankment between Johnston and 2nd/3rd Street interchanges

2B. Base Case with Core Area Single Interchange – 2nd/3rd Street

- Remove Johnston Street Downtown Interchange
- Change 2nd/3rd Street Downtown Interchange to TUDI
- Remove RR Crossing Grade Separation at Johnston Street/Louisiana Avenue
- Maintain Jefferson Street RR Crossing Grade Separation
- Evangeline Thruway remains connected to overall frontage road system
- Portion of mainline I-49 on embankment between Johnston and 2nd/3rd Street interchanges

3A. Split Diamond/At-Grade Connector Roads

- Change Johnston and 2nd/3rd Street Downtown Interchanges to function as a split diamond interchange (at-grade) with connecting road system between half-diamonds:
 - Johnston/Louisiana will be half-diamond to/from the south
 - 2nd/3rd Streets will be half-diamond to/from the north
- Connecting roads between interchanges are at-grade and access controlled
- Maintain freeway on structure between Jefferson and Johnston Streets
- Remove RR Crossing Grade Separations at Johnston and 2nd/3rd Streets
- Maintain Jefferson Street RR Crossing Grade Separation
- Evangeline Thruway remains connected to overall frontage road system

3B. Split Diamond/Depressed Open Connector Roads

- Change Johnston and 2nd/3rd Street Downtown Interchanges to function as a split diamond interchange with connecting road system between half-diamonds:
 - Johnston/Louisiana will be half-diamond to/from the south
 - 2nd/3rd Streets will be half-diamond to/from the north
- Connecting roads between interchanges are depressed in open trench
- Maintain freeway on structure between Jefferson and Johnston Streets
- Maintain two (2nd/3rd and Johnston Streets) RR Crossing Grade Separations
- Elevate existing Jefferson Street RR Crossing Grade Separation (convert to at-grade) with Jefferson Street spanning over connecting roads in trench
- Evangeline Thruway remains connected to overall frontage road system

3C. Split Diamond/Depressed Closed Connector Roads

- Change Johnston and 2nd/3rd Street Downtown Interchanges to function as a split diamond interchange with connecting road system between half-diamonds:
 - Johnston/Louisiana will be half-diamond to/from the south

- 2nd/3rd Streets will be half-diamond to/from the north
 - Connecting roads between interchanges are depressed, in tunnel (or cut and cover)
 - Maintain freeway on structure between Jefferson and Johnston Streets
 - Elevate existing Jefferson Street RR Crossing Grade Separation (convert to at-grade) with Jefferson Street spanning over connecting roads in trench
 - Maintain two (2nd/3rd and Johnston Streets) RR Crossing Grade Separations
 - Evangeline Thruway remains connected to overall frontage road system

- 4A. Evangeline Thruway Connectivity System (with additional RR grade separations)
 - Remove Johnston and 2nd/3rd Street Downtown Interchanges
 - Maintain 2nd and 3rd Streets (split) as part of Downtown Grid System
 - Evangeline Thruway remains connected to overall frontage road system with ramp pairs to I-49 Lafayette Connector:
 - Maintains one-way couplet arterials between ramp pairs
 - Overall one-way couplet arterials, Johnston Street, 2nd Street and 3rd Street, developed as “Grand Boulevard” concept with significant landscape and urban design improvements
 - Enhanced intersection treatments between Evangeline Thruway and Johnston, 2nd and 3rd Streets (e.g., roundabouts) to create “gateway” entries to Downtown
 - Potential associated land acquisition program to create redevelopment area between and adjacent to one-way couplet arterials
 - Maintain freeway on structure between Jefferson and Johnston Streets
 - Provide two additional (2nd and Johnston Streets) RR Crossing Grade Separations
 - Maintain Jefferson Street RR Crossing Grade Separation

- 4B. Evangeline Thruway Connectivity System (without additional RR grade separations)
 - Remove Johnston and 2nd/3rd Street Downtown Interchanges
 - Maintain 2nd and 3rd Streets (split) as part of Downtown Grid System
 - Evangeline Thruway remains connected to overall frontage road system with ramp pairs to I-49 Lafayette Connector:
 - Maintains one-way couplet arterials between ramp pairs
 - Overall one-way couplet arterials, Johnston Street, 2nd Street and 3rd Street, developed as “Grand Boulevard” concept with significant landscape and urban design improvements
 - Enhanced intersection treatments between Evangeline Thruway and Johnston, 2nd and 3rd Street (e.g., roundabouts) to create “gateway” entries to Downtown
 - Potential associated land acquisition program to create redevelopment area between and adjacent to one-way couplet arterials

- Maintain freeway on structure between Jefferson and Johnston Streets
- Remove RR Crossing Grade Separations at Johnston and 2nd Streets
- Maintain Jefferson Street RR Crossing Grade Separation

4C. Evangeline Thruway Paired Two-Way Connectivity System (without RR grade separations)

- Remove Johnston and 2nd/3rd Street Downtown Interchanges
- Maintain 2nd and 3rd Streets (split) as part of Downtown Grid System
- Evangeline Thruway remains connected to overall frontage road system with ramp pairs to I-49 Lafayette Connector:
 - Becomes a paired two-way arterial connectivity system (4 lanes each) between ramp pairs
 - Overall Evangeline Thruway, Johnston Street, 2nd Street and 3rd Street, developed as “Grand Boulevard” concept with significant landscape and urban design improvements
 - Enhanced intersection treatments between Evangeline Thruway and Johnston, 2nd and 3rd Streets (e.g., roundabouts) to create “gateway” entries to Downtown
 - Potential associated land acquisition program to create redevelopment area between and adjacent to paired arterials
- Maintain freeway on structure between Jefferson and Johnston Streets
- Remove RR Crossing Grade Separations at Johnston and 2nd Streets
- Maintain/enhance Jefferson Street RR Crossing Grade Separation

4D. Evangeline Parkway Connectivity System

- Remove Johnston and 2nd/3rd Street Downtown Interchanges
- Maintain 2nd and 3rd Streets (split) as part of Downtown Grid System
- Existing SB Evangeline Thruway becomes a two-way major arterial (4 or 6 lanes) connected to the frontage road/ramp pair system from I-49
- Existing SB Evangeline Thruway is developed as an “Urban Parkway” with median, and extensive landscape and urban design improvements
- Existing NB Evangeline Thruway is rebuilt as local street and is re-absorbed into neighborhood grid street system
- Enhanced intersection treatments between Evangeline Parkway and Johnston, 2nd and 3rd Streets (e.g., roundabouts) to create “gateway” entries to Downtown
- Maintain freeway on structure between Jefferson and Johnston Streets
- Remove RR Crossing Grade Separations at Johnston and 2nd Streets
- Maintain Jefferson Street RR Crossing Grade Separation

5A. Evangeline Corridor Local Street System

- Remove 2nd/3rd Street Downtown Interchange
- Change Johnston Street Downtown Interchange to TUDI

- Maintain 2nd and 3rd Streets (split) as part of Downtown Grid System
- Return Evangeline Thruway to local street system, and develop parallel frontage roads throughout Downtown area along I-49 Connector
- Enhanced intersection treatments between frontage roads and Johnston, 2nd and 3rd Street (e.g., roundabouts) to create “gateway” entries to Downtown
- Portion of mainline I-49 on embankment between Johnston and 2nd/3rd Street interchanges
- Remove RR Crossing Grade Separation 2nd Street
- Maintain Jefferson Street and Johnston Street RR Crossing Grade Separations

6A. Semi-Depressed I-49 Lafayette Connector Mainline

- Semi-depress I-49 Mainline (approx. 10 ft. below existing Evangeline) from south of Pinhook Road to Hobson Street
- Remove Johnston and 2nd/3rd Street Single Point Urban Interchanges (SPUI)
- Remove Jefferson Street RR Crossing Grade Separation
- Provide roadway overpasses at Pinhook Road, Taft Street, Johnston Street, 6th Street, Jefferson Street, 2nd Street, 3rd Street, Simcoe Street and Mudd Avenue for cross street connectivity
- Roadway overpasses at Johnston, 6th, and Jefferson Streets are also elevated over railroad
- Elevate Mudd Avenue on structure over Semi-Depressed I-49 Mainline and Frontage Roads
- Evangeline Thruway (existing at-grade and new elevated segments) remains connected to overall frontage road system with ramp pairs to I-49 Lafayette Connector
- Depress Cypress Street at 6th and Jefferson Streets

6B. Covered Semi-Depressed I-49 Lafayette Connector Mainline

- Semi-depress I-49 Mainline (approx. 10 ft. below existing Evangeline) from south of Pinhook Road to Hobson Street
- Cover semi-depressed mainline from north of Taft Street to Simcoe Street (to create a tunnel like appearance) to provide opportunity for other uses above the I-49 mainline
- Remove Johnston and 2nd/3rd Street Single Point Urban Interchanges (SPUI)
- Remove Jefferson Street RR Crossing Grade Separation
- Provide roadway overpasses at Pinhook Road, Taft Street, Johnston Street, 6th Street, Jefferson Street, 2nd Street, 3rd Street, Simcoe Street and Mudd Avenue for cross street connectivity
- Roadway overpasses at Johnston, 6th, and Jefferson Streets are also elevated over railroad
- Elevate Mudd Avenue on structure over Semi-Depressed I-49 Mainline and Frontage Roads

- Evangeline Thruway (existing at-grade and new elevated segments) remains connected to overall frontage road system with ramp pairs to I-49 Lafayette Connector
- Depress Cypress Street at 6th and Jefferson Streets

Potential Spot Improvements

1. Provide up to 30-foot separation between mainline elevated structures
2. Realignment of Evangeline Thruway and 2nd/3rd Street Intersection
3. Realignment to achieve Castille/MLK Connection
4. Evaluate NB Braided Ramps in Selected Alternative within Downtown Area
5. Evaluate SB Braided Ramps in Selected Alternative within Downtown Area
6. Resolution of property impacts along Kaliste Saloom Road
7. Resolution of hotel property impacts on Hugh Wallis Road
8. Elevate or eliminate frontage roads through Beaver Park, impacting east/west connectivity in park and along Vermilion River
9. Resolution of auto dealership impacts south of University Avenue
10. Minimize airport impacts by evaluating potentially depressing University Avenue/Surrey Street under I-49, or vice versa
11. North Gateway area safe and convenient bicycle/pedestrian crossings across corridor
12. Potential bicycle/pedestrian pathways full length of I-49 Connector corridor
13. Potential to convert one local street across corridor between Downtown and adjacent neighborhoods into bicycle/transit/pedestrian-only corridor
14. Potential location of Signature Bridge(s)
15. Elevate I-49 Connector on structure between Jefferson and Johnston Streets, allowing enhanced local connectivity to/from neighborhoods and downtown
16. Raise mainline structure in Downtown area higher than 22-feet to create “gateway” to Downtown without visually impacting adjacent neighborhoods
17. Consider railroad underpass at Pinhook Road
18. Avoidance of historic resources (e.g., Coburn Building, Freetown-Port Rico Historic District)
19. Minimize Johnston Street Interchange impacts on Freetown-Port Rico Historic District, and maintain Cypress Street connectivity through Freetown-Port Rico Neighborhood and Downtown
20. Minimize impacts to Freetown-Port Rico Historic District (Crapouville)
21. Optimize circulation access to/from St. Genevieve Catholic Church along Evangeline Thruway (or other options)
22. Minimize visual impacts of bridges, other structures and local traffic on St. Genevieve Catholic Church and Sterling Grove Historic District
23. Improve capacity at I-10/I-49 systems interchange ramps
24. Minimize/remediate impact on Live Oak Tree in North Gateway area of corridor