

Feasibility Assessment

Resilience and Economic Impacts Enterprise Boulevard Riverfront Corridor Extension

City of Lake Charles

The logo for HGA, featuring the letters 'HGA' in a stylized, blue, serif font with a horizontal line underneath.The logo for McNeese State University, featuring a large yellow 'M' with a blue outline, followed by the text 'MCNEESE STATE UNIVERSITY' in blue, serif font, with a small yellow flame icon above the word 'STATE'.The logo for the International Sustainable Resilience Center (ISRC), featuring the letters 'ISRC' in a large, green, sans-serif font, with a globe icon to the right of the 'C'. Below the logo, the text 'INTERNATIONAL SUSTAINABLE RESILIENCE CENTER' and 'POWERED BY PUBLIC PRIVATE PARTNERSHIPS' is written in a smaller, green, sans-serif font.

Before We Begin:

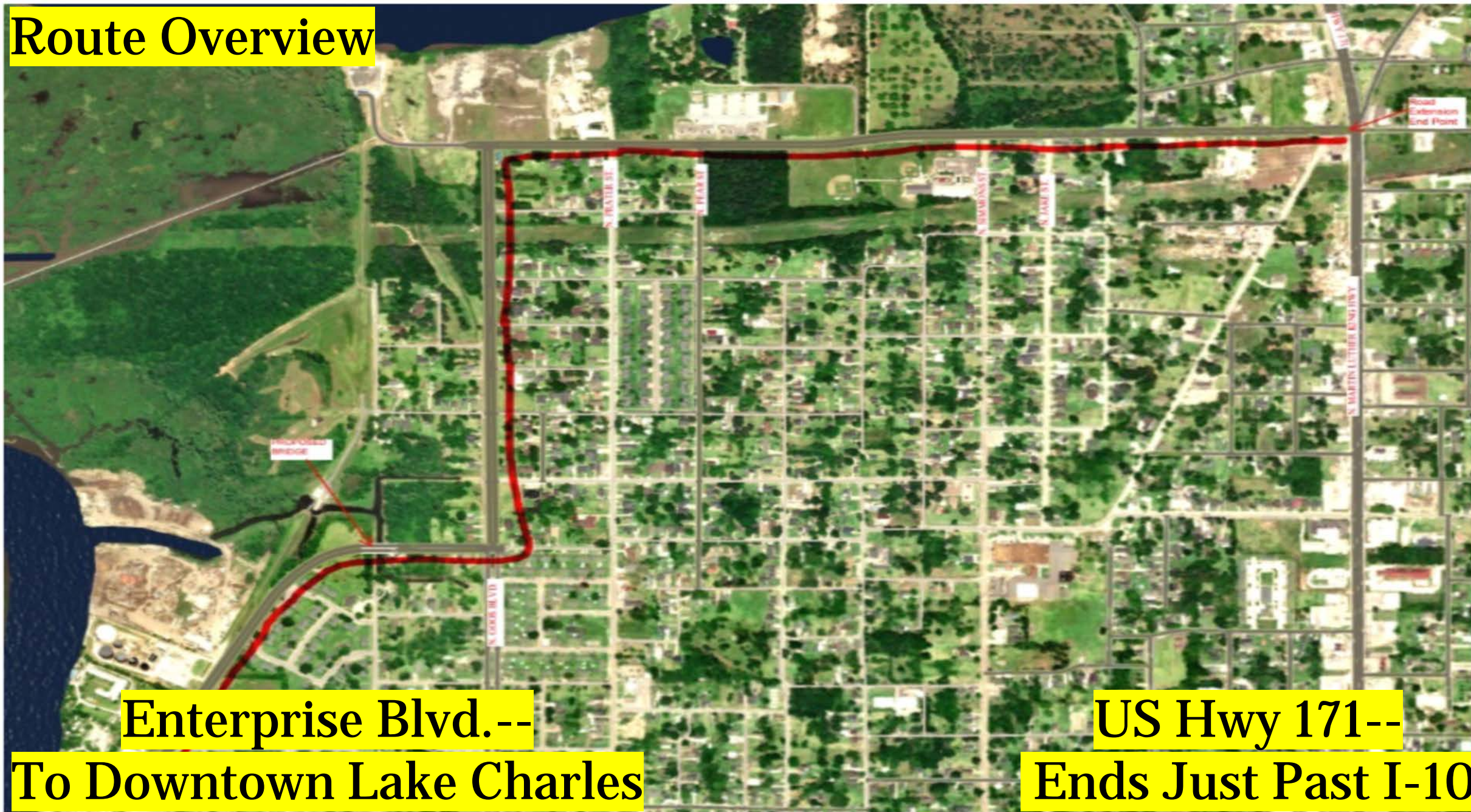
- On August 27th, two days before the 15th observance of Hurricane Katrina, Hurricane Laura hit the coast of Southwest Louisiana, and unleashed category 3-force winds that heavily damaged Lake Charles. It tied the 1856 Last Island hurricane as the strongest hurricane to make landfall in Louisiana. Estimated damages are \$9 Billion; with 71 fatalities
- The home of Ernie Broussard, at that time Director of the Lake Charles office of engineering firm HGA who subcontracted with ISRC, now with Fugro, was damaged. Ernie played a pivotal role in completion of this study, and would have been with us today if not for that disaster
- Also, the home of our colleague and presenter Dr. Dan Groft was also damaged, and is still without water
- Thoughts and prayers for our friends throughout W. Louisiana, E. Texas

Mission Statement

To determine the feasibility of investing significant dollars, the City of Lake Charles elected to engage planning & economic development professionals to assess the route, design, performance and overall economic impact of a proposed loop extending from the current terminus of Enterprise Boulevard to its intersection with Hwy. 171 in northern Lake Charles, LA. The team of HGA & ISRC, along with the H.C. Drew Center for Business and Economic Analysis at McNeese State University, collaborated to assess the following elements:

1. Return on Investment in Resilience Analysis utilizing the Ant Colony Algorithm
2. Economic Assessment identifying widely accepted locational quotient models identifying which sectors are underrepresented within the targeted impact area
3. In-depth Economic Impact Analysis of positive results from the project using Regional Economic Models Incorporated (REMI) *TranSight* model (Dr. Groft)
4. Economic Impact resulting from resiliency and economic activity from expansion
5. Financing or Funding sources including People-First Public Private Partnerships

Route Overview



Enterprise Blvd.--

To Downtown Lake Charles

US Hwy 171--

Ends Just Past I-10

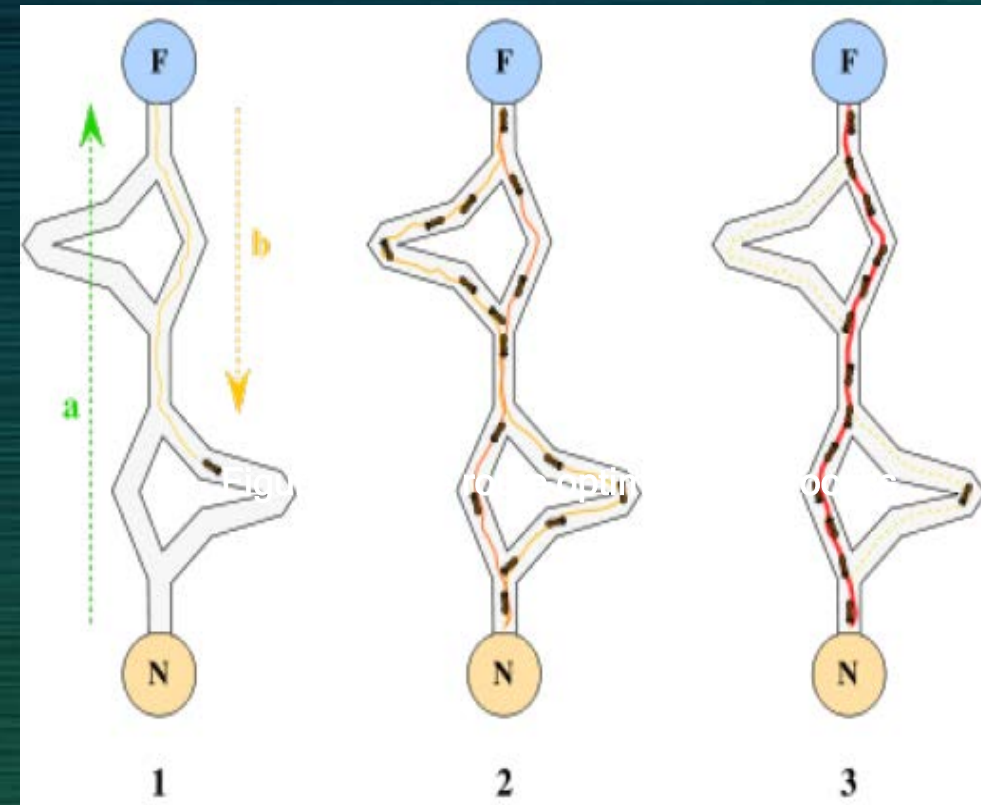
Transportation Analysis

The functionality of new streets in a disaster evacuation scenario is best predicted using an algorithm called Any Colony Optimization (ACO), as it has proven to be accurate in predicting the movement of traffic in an evacuation scenario. This algorithm can address questions such as:

- What routes are most likely to be used in an evacuation scenario?
- What impacts will a new route have on existing evacuation routes?
- How will a new street that can be used for evacuation impact existing economic corridors in peacetime?
- How does a new route translate into reduction in economic loss in an evacuation scenario?

Ant Colony Optimization Algorithm

- Current daily traffic counts on Hwy. 171 total 34,926. The Enterprise Boulevard roadway is expected to collect roughly 20% or roughly 7,000 vehicles per day in its first year.
- Following the ACO Algorithm, over the following four years of Enterprise Boulevard functioning as a four-lane corridor, will ultimately result in an additional net gain of 10,000 cars per day or 16,986 cars utilizing or accessing North Lake Charles, reducing congestion on Hwy 171.
- Using FEMA's cost benefit analysis model, the performance of this roadway may result in a reduction in economic damage equal to \$22.4M over the 20-year life cycle of the improvement. In summary, the addition of Enterprise Blvd. will have an obvious positive impact on the ability of citizens, businesses, to evacuate in an emergency, plus enabling first responders in, all translating into reduced economic loss.



Economic Overview

- Pre-COVID19, pre-Hurricane Laura, the 2019 Louisiana Economic Outlook by economics professor emeritus at LSU Dr. Loren Scott states that the Lake Charles MSA, which includes Calcasieu and Cameron parishes, added 26,800 jobs over the past five years and expanded by 5.4% a year on average.
- Lake Charles GDP=\$17.32B (pre-COVID19)
 - Best economy in the State, fastest growing in the nation
 - Increased population results in growing demand for goods and services
- Key Industry Drivers and Needs
 - The Location Quotient (LQ) model (sector concentration vs. US average) has determined that key industry drivers are petrochemical manufacturing, refining, gaming, maritime/LNG, aviation, and oilfield support industries.
- Of course, COVID19 and Hurricane Laura have changed everything--

Targeted Sectors due to corridor expansion

While the overall demographics for Calcasieu Parish in terms of job and economic growth were among the best in the U.S., the specific area of the proposed corridor is not sharing in this prosperity. This historically underprivileged and underserved area may see increased development through increased access and much larger traffic counts.

Underrepresented represented sectors in the economy, those with low Location Quotients, include:

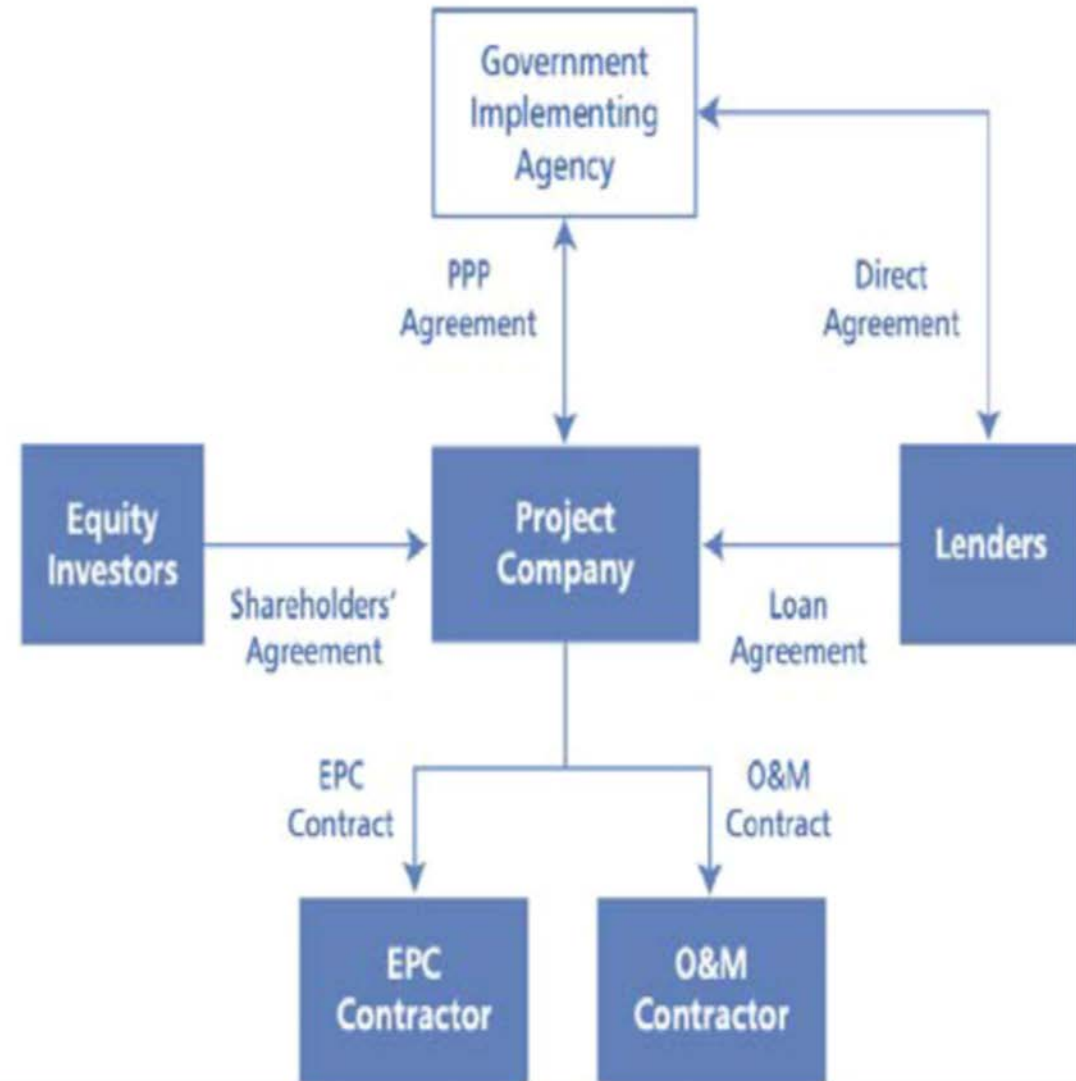
- Retirement/Lifestyle Center
- Home Remodeling and Repair
- Personal and Health Care
- Data Analysis/Storage and/or Cyber-Security
- Restaurants and Gas/Convenience Stores

Funding and Financing Options

- U.S. Army Corps of Engineers Congressional Approach
- U.S. Army Corps of Engineers Planning Assistance to States Program
- EPA Brownfields Assessment and Remediation Funding
- EPA Smart Growth Grants Program
- CPEX Louisiana Community Planning
- Louisiana Recreational Trails Program
- LDOTD Transportation Enhancements Program (TEP)
- NPS Land and Water Conservation Fund State Assistance Grants
- HUD Community Development Block Grants
- NPS Urban Park and Recreation Recovery Program (UPARR)
- Tax Increment Financing
- Capital Outlay
- Louisiana Community Development Block Grant Program
- Office of Community Development – Disaster Recovery Unit (OCD-DRU)

People First PPP Strategy

From ISRC SVP David Baxter:
PPPs are seen by many as a tool that can be used to mobilize alternative financing from the private sector to build infrastructure where a public funding gap exists and/or to provide increased design, building, and operational efficiency—The People-First Model followed by ISRC includes Transparency, Equity, Inclusion, Financial Viability, Resilience, and Sustainability



Separate Presentation: Economic Impact Analysis Using *REMI TranSight*

Dr Daniel Groft

H.C. Drew Center for Business and Economic Analysis

McNeese State University

Overall Summary

- The total economic impacts resulting from extending Enterprise Boulevard, including reduction in loss from increased evacuation capacity and new business development opportunities, could total over \$1.4 billion over the 20-year lifespan of the roadway
- A People-First PPP may be the best solution if the project is successful in securing either discretionary dollars from a state or federal program, and private sector investment is primed by the successful placement of businesses identified in the economic analysis
- The City's participation in the way of a 10% match or completed engineering could further prime the efficiencies and feasibility of this project. Personal incomes will exceed \$674M, and base tax revenue will increase by \$6.7M. These impacts taken together show a positive reason for investing the estimated \$40M expansion cost over the same timeframe
- In summary, the study did not suggest the exclusive use of City funds for this project. A private sector co-investor, and funding from one or more of the previously listed options in a PfPPP, may work

THANK YOU!!

David Dodd, CEcD/FM
International Sustainable
Resilience Center, Inc.

New Orleans, LA

318-525-5559

david@ippprc.org