This document summarizes the process by which the LA SAFE project portfolio has been developed and describes each of the 10 projects in detail.

Grounded in CPRA Data

LA SAFE is informed by the data that CPRA produced for the 2017 Coastal Master Plan showing increased future flood risk, even with full Coastal Master Plan implementation. LA SAFE used these maps as a basis for design and shared them with residents at community meetings to orient the conversations around Louisiana’s best understanding of future risk.

2067 Land Loss and Flood Risk with the Coastal Master Plan

CPRA Medium Scenario with Full Master Plan Implementation. This data were originally produced for the 2017 CPRA Coastal Master Plan. Source: CPRA and USGS

LA SAFE Engagement Process

To understand and incorporate community vision into the plan, LA SAFE conducted a 9-month long engagement outreach process that gathered the perspectives of over 2,800 residents, parish officials, and other stakeholders across the coast. Through five rounds of iterative community meetings in each of the six parishes, residents identified challenges, recommended plan goals, evaluated strategies, approved the vision for their parishes, and directly impacted project selection. Meetings incorporated interactive activities for residents to inform each stage of plan development.

The content of the meetings built towards policies, programs, and projects that will make each parish more resilient to increasing flood risk in the future. The process culminated in the final round when residents evaluated proposed programs and projects for the LA SAFE to invest in using the $40M HUD grant awarded to the Office of Community Development for this work. Each demonstration project was informed by community input throughout the engagement process.

In the final meetings, residents voted on six project options in each of the six LA SAFE parishes - Plaquemines, Terrebonne, Lafourche, St. John the Baptist, St. Tammany, and Jefferson Parish. The resulting score became the first of six criteria for final project selection. A selection committee evaluated the projects for five other criteria to arrive at a final portfolio. The resulting ten projects are largely in line with community preference: seven of them are the first and second-most preferred by residents.

71 Community Meetings

2,835 Participants

1. Round 1 Meetings: Identify Challenges and Opportunities
   March & April 2017
   6 Parish-wide Meetings
   509 Attendees

2. Round 2 Meetings: Locate Areas of Opportunity and Propose Strategies
   May & June 2017
   21 Community Meetings
   551 Attendees

3. Round 3 Meetings: Evaluate Parish Vision and Strategies Across Risk Zones
   July & August 2017
   8 Parish-wide Meetings
   387 Attendees

4. Round 4 Meetings: Vet Draft Strategies with Parish Officials and Stakeholders
   October 2017
   29 Community Meetings
   340+ Attendees

5. Round 5 Meetings: Evaluate Six Catalytic Projects in Each Parish
   December 2017
   7 Parish-wide Meetings
   551 Meeting Attendees
   517 Online Poll Participants

Project Evaluation

LA SAFE is currently drafting strategy documents for the region and six parishes

Projects Selected

March 2018
Round 1 Meetings

LA SAFE hosted a parish-wide meeting in each of the six parishes to begin the strategy development process. At these meetings, the LA SAFE team presented environmental data focused on land loss, flood risk, population movements and economic change in the region. Then, community members participated in two discussion-based activities in which they described what they see as the parish’s strengths, challenges, and opportunities given the changes they’ve seen in the parish and the data that LA SAFE presented.

The results from meeting 1 are shown on the opposite page.

“As far as what we can look to in the future, the most resounding component is that we want to see our assets preserved and protected. Smart growth and planned development, not just development... We want quality, not just stuff.”

-St. Tammany Resident, Round 1 Meeting

Residents brainstorm their community values and goals within the 3 categories of: Community & Culture, Economy & jobs, and Environment & Sustainability

Top 10 Most Common Challenges, Strengths, and Opportunities Described in Responses

Challenges
1. Population Loss, Growth, and Movement
2. Flooding
3. Loss of Businesses
4. Increasing Costs and Property Values
5. Continued land loss and dying ecosystem
6. Job Loss/Income Security
7. Seafood Industry Instability
8. Wildlife Movement/Death
9. Lack of Education & Information
10. Lack of Social Resources

Strengths
1. Quality of life
2. Community Closeness
3. Outdoor Recreation
4. Traditions & Culture
5. Business & Industry
6. Natural Resources
7. Growth & Adaptation
8. Natural Beauty
9. Good Location
10. Good Schools

Opportunities
1. Diversify & Develop Economy
2. Protection & Restoration
3. Improve Education & Job Training
4. Land & Water Management
5. Improve Transportation
6. Regulations & Policy
7. Preserve Community Stability & Quality of Life
8. Recreation & Youth Programs
9. Plan & Build for Future Conditions
10. Improve Infrastructure

Plaquemines  St. Tammany  Lafourche  Terrebonne  St. John  Jefferson
Round 2 Meetings

The second round of LA SAFE meetings focused on conversations at the community scale. The team held twenty-one meetings in nineteen towns and cities across the six parishes, which were suggested by residents at Meeting 1. Meeting at this scale allowed the team to discuss local issues in more depth and with site specificity. Residents used maps to pinpoint challenges, and they proposed solutions to a multitude of issues across different types of environments and different levels of risk.

Residents answered adaptation questions related to the nine themes that emerged at Meeting 1, organized by time horizon: short term (0-10 years), medium term (10-25 years), and long term (25-50 years). These questions prompted residents to consider adaptation strategies that respond to anticipated impacts caused by increased flood risk and to illustrate their ideas on a map.

“I think the boat launches are important. It’s important to tourism and fishing. People don’t realize how important fishing is to people.”
—Lafourche Resident, Round 2 Meeting

Response Word Cloud

This word cloud shows the most common words discussed across all 21 meetings.

Question Themes

Residents chose a question card theme from each of the three categories below to discuss.

COMMUNITY & CULTURE
- Quality of Life
- Youth & Education
- Culture & Tourism

ENVIRONMENT & SUSTAINABILITY
- Stormwater Management
- Transportation
- Parks & Public Spaces

ECONOMY & JOBS
- Property Value & Cost of Living
- Local Economic Development
- Jobs & Job Training

The Round 2 activity map notes were documented and synthesized to create a map of residents’ strategy ideas, including assets to protect, opportunities to pursue, and hazards needing remediation.

A regional pattern emerged. In high risk areas, residents generally requested more recreational fishing and eco-tourism assets like public boat docks and nature trails. Residents cited these areas for increased commercial fishing, oil processing, coastal restoration, and wind energy production. In low risk areas, residents marked out areas for new residential development, business incubation, and walkable and bikeable neighborhoods that can attract and retain populations, especially young people. Residents identified the need for more stormwater management strategies in all populated areas. The most common problem residents cited was flooding roads, especially in high-risk areas.

The results from Round 2 further clarified the strategies that residents envision across risk typologies. The results suggested that residents understand that increasing flood risk will have major implications for the future in many ways beyond the direct risk to homes and property. Based on resident feedback, LA SAFE organized strategies and community benefits into five planning categories: Stormwater Management, Housing and Development, Transportation, Education, Economy and Jobs, and Culture & Recreation. These five categories reflect the ways that residents discussed and related strategies at Meeting 2.
Round 3 Meetings

The third round of meetings included one meeting in each parish, plus two meetings for the Vietnamese and Cambodian residents in Plaquemines Parish. The meetings centered around three interactive components: polling responses to multiple choice questions, a preference survey to evaluate visions for three risk levels, and an activity where residents expressed their like or dislike for individual strategies.

In the first exercise, participants anonymously responded to multiple-choice questions using clickers, the results of which appeared instantly on the screen. Questions related to stormwater management strategies, types of housing development, transportation expansion ideas, and investment strategies. Residents from different parishes answered differently, but some regional trends emerged that informed project development. Responses to three of the questions are below.

Which types of job opportunities would you like to see expanded in your parish? (315 responses)

If LA SAFE invested in a transportation project, which project would you most like to see funded? (300 responses)

Which of the following housing types would you most like to see funded? (311 responses)

“I would move for more raised protective housing. The Cajuns had it right; you need to build up.”

- St. Tammany Resident, Meeting 3

In the second part of the meeting, LA SAFE presented a community vision organized by the three risk levels, based on resident input in Round 2 combined with LA SAFE’s planning perspective taking into account future risk conditions. After the project team described how the five planning categories intersect with each level of risk, residents anonymously voted on their level of agreement with the overall vision for their parish. In all parishes, at each risk level, the majority of residents agreed with the visions presented. This evaluation tested and confirmed the draft vision that LA SAFE synthesized up to that point.
The third part of the meeting focused on the individual projects, programs, and policies that could potentially support the vision. On large table sheets, the residents evaluated a wide range of potential strategy components. Residents placed green dots on the ideas they liked, and red dots on those they did not like.

Results from this activity informed the draft strategies and project proposals developed following the Round 3 meetings.

“The fishermen know this landscape in and out. They have an intimate knowledge how to get there, what’s there, they’re experts. All the local people have all this knowledge for eco-tourism. If someone could invest in that, they could use what they already know.”

- Plaquemines Resident, Round 3 Meeting

Strategy Popularity

Each bar below represents one strategy that residents reacted to in this activity. There were 120 in all. The 20 most popular strategies across the region are shown above.

Top 20 Strategies Across All Categories and Parishes

1. Public Boat Docks
2. Cross-Parish Stormwater Management Strategy
3. Coastal Restoration Construction Jobs & Training
4. Improved Parish Drainage System
5. Job Training Programs
6. Job Opportunities in Renewable Energy
7. Increased Affordable Housing Options
8. Requirements for New Developments
9. Culturally Focused Camps & After-School Programs
10. Culvert/Ditch Maintenance
11. Commuter & Regional Rail
12. Complete Streets
13. Community Gardens and Planting Programs
14. Incentivize Essential Service Providers
15. Medium Density Housing (2-3 stories)
16. Improve Public Transportation Across Parish Lines
17. Create a Full-Time Drain Maintenance Department
18. Program to Restore Abandoned Property to Natural Condition
19. Increase Walkability & Sustainable Streetscape
20. Expand Boat Harbors

“We should put a green dot on affordable housing. I think this is good, but we should have more green features to make them more environmentally friendly like solar panels and water reuse systems. These additions could help lower costs.”

- Lafourche Resident, Round 3 Meeting
**Round 4 Meetings**

During this round of meetings, LA SAFE presented draft ideas and project concepts to parish officials, residents, and business leaders to get in-person feedback across each parish.

LA SAFE engaged stakeholders and residents through four meetings within each parish. Two of these were round-table discussions with parish officials from various departments whose input was valued for implementation feasibility, project siting, long term maintenance planning, and for the potential to leverage local funding sources. These officials included planners, engineers, elected leaders, and parks and recreation officials among others.

Two meetings per parish were open to the general public. These took the form of open-houses in some parishes, and participation in festivals in others. At these meetings, LA SAFE gathered comments and feedback on potential projects and surveyed residents about the vision for their parishes.

Prior to this round of meetings, LA SAFE surveyed existing parish and municipal plans and mapped all of the physical project proposals. This exercise illuminated the landscape of existing efforts, allowing LA SAFE to avoid duplication and to leverage pre-existing plans and integrate community adaptation goals. In many cases, existing efforts formed the basis of LA SAFE project recommendations. In these cases, LA SAFE proposed added community or risk reduction benefits. In other cases, the map shows gaps, where original LA SAFE projects supplement a need not currently being addressed.

During Round 4, LA SAFE integrated existing efforts into draft vision drawings and plans to engage parish officials, business leaders and residents to review draft projects, programs, and policies. Close engagement with these leaders lead to the finalized catalytic project recommendations that were presented in Round 5.

“Hurricane Harvey brought a good example of what poor planning brings; Houston showed picture of 30 years ago and now – green space vs. concrete. Areas with concrete all flooded. Cities like Gretna are built out, houses on almost every lot. We have made mistakes – all cities have made mistakes in planning. The real challenge is how to change what we have done wrong.”

-Jefferson Parish Official, Round 4 Meeting
Round 5 Meetings

In the fifth and final round of meetings, residents in each parish evaluated and marked their preferences among six catalytic project proposals. The 36 proposals across the coast reflected the vision and input gathered throughout the engagement process and targeted opportunities that residents identified in each parish.

The project proposal boards provided detailed descriptions, concept drawings and example images along with information on cost, location, area, and potential partners to give residents an idea of what the implementation of each project would entail. Each proposal highlighted how it responds to multiple community benefits. Residents used tokens to award their points to the proposals. In addition to the six parish meetings, a seventh meeting was held to accommodate Vietnamese and Khmer-speaking residents across four of the parishes. An online poll was also active for three weeks after each parish meeting to gather input from residents unable to attend. In all, over 1000 residents ranked the project proposals in their parish. Their preferences accounted for 20% of the selection criteria and is reflected in the final project selection.

WHY YOUR PREFERENCE MATTERS

These criteria will be used to evaluate the final proposals:

1. Public Preference - The result of the preference polling tonight and an online poll for other past meeting participants.
2. Leverage Funds - The level of matching funds from other sources to implement the project.
3. LMI Benefit - Points awarded to projects that predominately benefit a low-to-moderate income population.
4. Public Benefit (Quantitative) - The level of benefit to the public that can be measured. For example, the number of units created in a housing proposal, or the amount of water stored in a stormwater management proposal.
5. Public Benefit (Qualitative) - The degree to which the project addresses future flood risk in a unique way and/or improves quality of life for residents.
6. CRS Score - Awarded to projects that gain points in FEMA’s Community Rating System (CRS), which lowers flood insurance rates.

Below: A board next to the polling station explained the project selection criteria.

Poll results at the Vietnamese and Cambodian Meeting are revealed. The proposals represented by the yellow tubes earned the most points.
Catalytic Projects

At the fifth round of meetings, residents across the coast evaluated thirty-six catalytic projects. Many of these projects are place-specific interventions, including safe harbors, stormwater retention ponds, and housing redevelopment. Other projects are program-oriented, including business incubators, mental health support, and equipment upgrade financing for fishermen and farmers. Some projects have been in development for years outside of LA SAFE, such as the Louisiana Wetlands Education Center. Others include additions to existing efforts, and many are original proposals.

In each parish, the six projects reflect the diverse needs that community members expressed throughout the engagement process. They address risk, reduce flooding, foster cultural interaction, support the economy, provide educational opportunities, address housing needs, and improve transportation. While no one project can accomplish all of these goals in equal measure, these projects represent a wide spectrum of model adaptation strategies for the future.

The graphic to the right shows all the projects in each parish in order of community popularity. The projects with a gold corner and star are those that earned the most points by the selection committee, which took into account public preference, leverage funds, LMI benefit, public benefit (quantitative and qualitative), and CRS score. The final project portfolio is largely in line with resident preference; seven of the ten projects were ranked in the top two by residents.
Final Project Portfolio

This project portfolio includes a wide range of adaptation strategies that respond to needs across five adaptation categories that residents and stakeholders identified during the engagement process. Taken as a whole, these projects represent the variety of adaptation strategies that respond to community impacts caused by increasing flood risk. Below is the list of LA SAFE projects and the type of intervention each provides. Full descriptions of each project follow.

<table>
<thead>
<tr>
<th>Parish</th>
<th>Project Name</th>
<th>Type</th>
<th>Primary Adaptation Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Tammany</td>
<td>Safe Haven Blue-Green Campus &amp; Trails</td>
<td>Stormwater management landscaping to support a mental health program</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>St. John</td>
<td>Airline &amp; Main Complete Streets</td>
<td>Resilient Street Design model</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>Plaquemines</td>
<td>Harbor of Refuge</td>
<td>Safe harbor usable year-round</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td></td>
<td>Mental Health &amp; Substance Abuse Program</td>
<td>Support for health services related to consequences of increased risk</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>Jefferson</td>
<td>Gretna Resilience District Kickstart</td>
<td>Public park that stores stormwater</td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
<tr>
<td></td>
<td>Louisiana Wetland Education Center</td>
<td>Education center focused on coastal ecology</td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
<tr>
<td>Terrebonne</td>
<td>Buyouts for Permanent Resident Households</td>
<td>Buyout program for high risk area outside of protection system</td>
<td><img src="image7.png" alt="Image" /></td>
</tr>
<tr>
<td></td>
<td>Lake Boudreaux Living Mitigation</td>
<td>Wetland restoration and storm surge reduction</td>
<td><img src="image8.png" alt="Image" /></td>
</tr>
<tr>
<td>Lafourche</td>
<td>Emerging Industry Business Incubator</td>
<td>Business incubator focused on innovative and resilient sectors</td>
<td><img src="image9.png" alt="Image" /></td>
</tr>
<tr>
<td></td>
<td>Resilient Housing Prototype</td>
<td>Model for affordable elevated housing in moderate risk areas</td>
<td><img src="image10.png" alt="Image" /></td>
</tr>
</tbody>
</table>

Even in higher ground locations, natural systems must be maximized to retain stormwater in response to current and future flood risk. The Safe Haven Blue-Green Campus & Trails project is a Community Nonstructural Mitigation/Flood Risk Reduction and Public Services project that will enhance detention capabilities in a critical drainage area adjacent to Cane Bayou, protecting campus facilities and surrounding neighborhood residences. The project, located in Mandeville, will divert stormwater into existing forested land, illustrating how a multi-phase development with existing infrastructure in vulnerable environments can be repurposed to benefit surrounding areas. The project aims to catalyze development that integrates Safe Haven Campus and the essential services it provides into the surrounding community, with the ultimate goal of destigmatizing mental health and substance abuse programs and encouraging an inclusive culture in which Safe Haven’s critical services are better utilized.

During the first round of LA SAFE meetings, the project team hosted stakeholders of St. Tammany Parish at Northshore High School in Slidell. At this meeting, many residents recently affected by the floods of May and August 2016 were interested in discussing LA SAFE’s ability to help alleviate flood conditions both along the coast and near rivers, bayous and streams. The data gathered during this meeting clearly reveal residents’ anxiety about flood risk. Residents mentioned feeling stressed, nervous and concerned for the future condition of their community. The project team noted ten specific instances where attendees mentioned feeling fear and hopelessness. The residents who attended this meeting also expressed a desire to maintain the high quality of life in the parish through smarter development decisions as the population continues to grow. Meeting attendees spoke to a need for the regulation of certain development, especially in how it relates to environmental impact and putting people at risk. Much of the discussion in the first meeting revolved around recurring themes of smarter development, environmental impact and the high quality of life in St. Tammany. These categories were referenced approximately 150 times in a meeting that was attended by around 85 people. In the second round of meetings, attendees from Mandeville specifically identified a need to increase connectivity and to alleviate flood risk in the community. In round three, the project team presented attendees with a vision for St. Tammany Parish based on the data gathered in the previous two rounds of engagement. Residents agreed with the overall vision and presented the project team with recommendations for specific projects ideas. They wanted to see projects that increased greenspace and stormwater retention capabilities and improved connectivity in areas of low and moderate risk. In the fourth round of engagement, the parish and representatives from Safe Haven proposed the Safe Haven Blue-Green Campus & Trails project idea as an opportunity to implement the concepts recommended by the public during the previous rounds of LA SAFE meetings. Residents confirmed their desire to have improved stormwater management capabilities as well as essential social and mental health services in St. Tammany Parish during the public polling process in the round five meetings. Those who marked their preference for a particular project during round five collectively chose this project as their favorite overall for investment. Eighteen different zip codes were represented across the in-person and online polling platforms.
The Airline and Main Complete Streets project is a Resilient Infrastructure and Community Nonstructural Mitigation/Flood Risk Reduction project positioned along Airline Highway in LaPlace. This project is an example of how to plan for a future of heightened flood risk in a low risk area by incorporating stormwater management strategies into public infrastructure projects that also provide residents enhanced transportation options.

The proposal suggests a 1.3-mile street improvement on Airline Highway and a 0.3-mile improvement on Main Street. Funding is currently available for off-street pedestrian and cyclist paths, a green median and shade trees. This proposal adds green infrastructure components to hold and filter runoff and extends improvements to Main Street, adding new bioretention cells, sidewalks, permeable parking, native plantings and historic light poles and banners. Complete street designs like this one aim to attract reinvestment in commercial corridors, alleviate drainage systems and reduce flooding. Improved safety for pedestrians and cyclists enhance connectivity, aesthetics and urban identity.

During the first round of LA SAFE meetings, the project team hosted residents of St. John the Baptist Parish at the St. John the Baptist Parish Community Center in LaPlace. At this meeting, many attendees pointed out that the quality of drainage and stormwater management infrastructure in the parish needs improvement. Specifically, residents acknowledged drainage, flooding and stormwater management as areas of opportunity a combined 41 times in a meeting with around 64 attendees. The attendees also described a lack of connectivity and transportation options, mentioning both concerns 20 times. They related the connectivity issue back to a growing traffic and congestion problem in the parish.

In the second round of meetings, attendees from all over the parish again stressed the critical need for recreational space and improved stormwater detention capabilities. In meeting rounds three and four in St. John the Baptist Parish, the project team continued to work collaboratively with residents as well as parish leadership to develop a project based on the ideas presented by residents in previous rounds. Lack of proper drainage, safe multimodal transportation options and traffic congestion were recurring themes found in all rounds of meetings in St. John. As a major thoroughfare that runs through the parish, Airline Highway is an ideal location for the complete street enhancements and stormwater retention improvements recommended by parish residents.

The Airline and Main Complete Streets project will directly address residents’ concerns by creating better-connected, more inclusive transportation along a main artery through town. The project enjoys the support of both parish officials and residents, and it aligns with information gathered throughout the public engagement efforts of LA SAFE. The community affirmed its support of this project in person and online in the final round of meetings, when residents collectively chose this project as their number one preference.

The Plaquemines Harbor of Refuge project is primarily a Resilient Infrastructure project located in Empire, Louisiana. Plaquemines Parish is a Sportsman’s Paradise with some of the world’s best commercial and recreational fishing. The seafood industry is one of the leading employers in Louisiana, producing millions of pounds of shrimp, oysters, crabs and fish annually. However, as flood risk increases and land loss continues to occur, this industry’s viability faces a significant threat – specifically as it relates to vital equipment and infrastructure. This proposal would create a harbor of refuge for vessels to shelter in place during disaster events. The parish-operated harbor would incorporate marina amenities, wet- and dry-docking facilities as well as green infrastructure to help manage stormwater.

During the first round of LA SAFE meetings, the project team hosted residents of Plaquemines Parish at the YMCA in Port Sulphur, Louisiana. At this meeting, attendees made numerous comments about the opportunities and challenges facing the seafood industry, local businesses and the economy at large. Attendees referenced one of these three topics a combined 77 times during this first meeting. In the second round of meetings, attendees from throughout the parish again stressed the need to improve the economic viability of the parish, especially as it relates to the seafood industry. During this first meeting, attendees also began expressing the need to expand current harboring capabilities. On tabletop maps, attendees marked potential locations for a new harbor of refuge. Through this activity, Empire was identified as a location with existing infrastructure that is not sufficient to meet the current need. In meeting rounds three and four in Plaquemines Parish, the project team continued to work collaboratively with residents as well as parish leadership to develop a project based on the ideas presented by residents in previous rounds. Through additional outreach to partners such as the Louisiana SeaGrant and Coastal Communities Consulting, it became increasingly apparent that the parish needed more harboring capacity during peak season in addition to disaster events. The project enjoys the support of both parish officials and residents, and it aligns with information gathered throughout the public engagement efforts of LA SAFE. The community affirmed its support for this project in person and online in the final round of meetings, when residents collectively chose this project as their number one preference.
Mental Health and Substance Abuse Program

The Mental Health and Substance Abuse Program for Plaquemines Parish is a Public Services/ Education program as outlined in the LA SAFE Guidelines. Areas projected to experience high future flooding risk are, in many cases, currently experiencing significant environmental, cultural, economic, and social challenges. Severe, repetitive flooding events in recent years have devastated many low-lying communities along our coast, especially in Plaquemines Parish. As these events have occurred, populations have already started moving upland, disrupting community cohesion and the coast’s broader social fabric. These impacts, compounded with unfavorable future projections, have taken a significant emotional toll. This program will provide case management services for residents struggling with mental health and substance abuse issues. These services will help disadvantaged populations living in at-risk communities work through the emotional impacts of past disaster events and future increased flood risk. Plaquemines Community C.A.R.E. is an existing program that provides an array of mental health and substance abuse services to residents of Plaquemines Parish. The LA SAFE contribution will help maintain the existing programs and expand their services and reach.

During the first round of LA SAFE meetings, the project team hosted residents of Plaquemines Parish at the YMCA in Port Sulphur, Louisiana. The data gathered during this meeting clearly revealed residents’ anxiety about flood risk in addition to stressors over the current and future condition of the places they call home. In the second round of meetings, in which the project team met with smaller groups of residents in more localized public settings, substance abuse and the need for mental health services were first raised as major public health challenges in the parish. During and after the third round of public meetings, resident desire for programs to help those dealing with substance abuse and mental health issues became apparent. During the third round of meetings, the project team used an anonymous polling software to ask attendees direct questions related to an array of differing topics such as flooding, land use, building regulations and mental health and substance abuse. The results of the anonymous polls indicated to the project team that mental health and substance abuse are both sensitive topics and relevant issues in Plaquemines. When asked to give project, program and policy suggestions in the third round, residents recommended investing in programs that expand mental health services. Although this project did not emerge as the top preference in the fifth round public polling, it does have firm support from parish leadership, a Louisiana legislature representing Plaquemines and, more importantly, an established partner already providing these services in the community and eager to expand to meet growing need.

Jefferson Parish

Gretna Resilience District Kickstart

The Gretna Resilience District Kickstart is an ambitious Resilient Infrastructure and Community Nonstructural Mitigation/Flood Risk Reduction project. Two major components of the district, Gretna City Park and the 25th Street Canal, are of interest to the LA SAFE team for potential investment. Improvements to the park include greater stormwater retention, enhanced entryways, pathways and signage, additional seating and pavilions, and the installation of a tiered dock that will connect visitors to the water. The canal improvements include green infrastructure features to increase storage capacity and improve conveyance of stormwater in an area with a high concentration of repetitively flooded homes and businesses. In addition, the canal enhancements include the creation of recreational amenities for biking, walking and interactive community spaces.

During the first round of LA SAFE meetings, the project team hosted stakeholders from Jefferson Parish at the Alario Center in Westwego. At this meeting, many attendees pointed out the quality of drainage and stormwater management infrastructure in the parish needs improvement. Specifically, residents mentioned drainage, flooding and stormwater management as major concerns. In total, attendees expressed that there is a lack of recreational opportunity in the parish as well as a lack of connection to the natural environment; increases in greenspace and recreational opportunities were mentioned as priorities a combined 36 times. Attendees recognized the need and opportunity for multifunctional green spaces that both serve recreational purposes and drain and store water during storm events. In the second round of meetings, attendees again stressed the critical need for recreational space and improved stormwater detention capabilities. During round two, participants from the west bank directly referenced the area where the Gretna Resilience District Kickstart is proposed as an area where flooding is prevalent and repetitive flood loss properties are many. In meeting rounds three and four in Jefferson Parish, the project team continued to work collaboratively with residents as well as parish leadership to develop a project based on the ideas presented by residents in previous rounds. During rounds three and four, the often-flooded area in Gretna that was first mentioned by residents in round two was again brought up for discussion, this time by a partner at the parish level. The location is where the city has proposed implementing a resilience district modeled after the Gentilly Resilience District across the river in New Orleans. Through ongoing conversations with parish officials, residents and other stakeholders, the LA SAFE team identified the Gretna City Park and 25th Street Canal improvements as opportunities to help kickstart the parish’s efforts with projects that closely align with residents’ desire to see increased greenspace and stormwater management in a low risk area. The communities’ support of this project was affirmed in person and online in the final round of meetings, when residents representing 20 different zip codes in Jefferson Parish collectively chose this project as their number one preference.
Louisiana Wetland Education Center

The Louisiana Wetland Education Center is a Public Services/Education project located on the west bank of Jefferson Parish in the town of Jean Lafitte. LA SAFE has emphasized the value of educating our coastal population about current and future environmental conditions and the effects of flood risk. The Louisiana Wetlands Education Center will be an educational asset serving students and families in the region, with programming for all ages, including a research outpost and meeting location for agencies and institutions. The Center will promote preservation, conservation, and adaptation related to wetland ecosystems, using its location in the Jean Lafitte area as an outdoor classroom. Future phases would include an expanded fishing village to teach visitors about coastal community traditions, a treetop ropes course, water taxis to Grand Isle, kayak and canoe rental and overnight cabins. The Center is complementary to the existing Jean Lafitte Fisheries Market and adjacent to the Auditorium, Nature Trail and Multi-Purpose Facility and Museum. Under this proposal, LA SAFE would provide funding toward the Center’s construction.

During the first round of LA SAFE meetings, the project team hosted stakeholders of Jefferson Parish at the Alario Center in Westwego. At this meeting, residents expressed concern over the continued loss of land and wetlands as well as a lack of attractions and recreation in the parish. Meeting participants specifically mentioned challenges and opportunities relating to wetland loss, coastal education, ecotourism and recreation a combined 65 times. Residents also identified the parish’s natural resources, traditions and cultures as major strengths. In the second round of meetings, residents again stressed the need for expanded recreational opportunities and placed additional emphasis on the need for more education about the region’s environment and coastal issues, especially for children. Residents of Jean Lafitte were particularly keen on harnessing and further developing the natural resources of the area, recommending swamp tours, environmental curriculum and environmentally oriented attractions for visitors, among others. In the third round, meeting attendees identified education as the most important issue for the future of Jefferson Parish during the snap polling activity. Between rounds three and four in Jefferson Parish, the project team continued to work collaboratively with stakeholders of the parish as well as parish leadership to develop a project based on the ideas presented by residents in previous rounds. During this engagement process, Jean Lafitte Mayor, Timothy Kern, brought forward the Louisiana Wetland Education Center, a project that fits squarely with the recreation and wetland education goals of parish residents. The Louisiana Wetland Education Center enjoys broad support from residents, who ranked it second in the fifth round preference polling.

Terrebonne Parish

Buyouts for Permanent Resident Households

The Buyouts for Permanent Resident Households program is a Resilient Housing project that seeks to relocate the relatively few homeowners still living outside of the Morganza to the Gulf structural protection system. Areas not protected by the structural protection system are projected to experience very high flood risk. In Terrebonne Parish, most permanent residents living outside of the Morganza to the Gulf are located on Isle de Jean Charles; the State of Louisiana is in the process of resettling Isle de Jean Charles residents who would like to move to higher, safer ground. The Buyouts for Permanent Resident Households program would provide relocation assistance for the few permanent households outside of Morganza who are not part of the Isle de Jean Charles resettlement program, of which there are approximately seven. This program would be reinforced with policies intended to prevent future permanent residential development outside of the Morganza alignment.

The Buyouts for Permanent Resident Households program emanated from Terrebonne Parish Government officials in consultation with local officials in down bayou locales including those areas outside of current and planned structural protection systems. Additionally, through LA SAFE’s outreach and engagement efforts, citizen participants highlighted the following concepts which would support a strategic buyout program:

- Create a system for conservation easements
- Implement regulations restricting certain forms of development in high risk areas
- Reduce economic and social risk
- Account for decreasing home values in high risk environments precluding current residents from selling and moving to higher ground
- Decrease availability of government services down bayou, so people move to higher ground where services are more readily available
- Account for populations moving upland because of increasing insurance rates

Finally, more than 80% of citizen participants agreed with a future vision for high risk environments that included fewer permanent resident households and more seasonal and workforce housing.
Lake Boudreaux Living Mitigation

The Lake Boudreaux Living Mitigation project is a Resilient Infrastructure and Community Nonstructural Mitigation/Flood Risk Reduction project that will be a model for how certain geographies think through a future with increasing flood risk. This project will operate as one of multiple lines of defense that will work together to protect the people and property of Terrebonne Parish. This project will create over 300 acres of terraces and marshland within the Morganza to the Gulf risk reduction system that will assist in reducing the impacts of storm surge. The terraces also have environmental benefits such as enhancing submerged aquatic vegetation growth, restoring habitats, and trapping suspended sediments generated by wind and wave action.

During the first round of LA SAFE meetings, the project team hosted stakeholders of Terrebonne Parish at the Houma Terrebonne Civic Center in Houma, Louisiana. At this meeting, many attendees pointed out Terrebonne Parish’s many strengths, including the fact that it is a sportsman’s paradise with an abundance of natural beauty. To be more specific, approximately 40 datapoints directly relate back either to the parish as a sportsman’s paradise or to the parish’s natural beauty. Additionally, attendees mentioned issues of flooding, land loss and a need for environmental restoration as significant challenges to the parish over 55 times. The Lake Boudreaux project offers a unique opportunity to synthesize all of these challenges and opportunities into a single project that provides multiple public benefits. This project was designed in partnership with parish staff and has support from parish leadership. As a small-scale restoration and protection project that doubles as a public amenity, the Lake Boudreaux Living Mitigation project aligns closely with the public’s vision for this region of Terrebonne Parish and directly addresses the opportunities and challenges residents identified throughout the LA SAFE engagement process. The project ranked number one out of the six projects presented in the fifth and final round of meetings in Terrebonne parish.

Emerging Industry Business Incubator

The Emerging Industry and Business Incubator is an Economic Development project in Lafourche Parish. Economic resilience is a cornerstone of LA SAFE. A business incubator will help launch new businesses, diversifying the economy with industries that will strengthen the region in the future. As part of the accelerator program, entrepreneurs will have access to a mentor in their field to help guide them through the program as they start their business. The incubator provides a co-working space with access to shared office equipment and a communal kitchen.

During the first round of LA SAFE meetings, residents expressed concerns over the loss of business and industry in the parish. Attendees referenced the opportunities and challenges related to the local economy a combined 45 times during this first meeting. In the second round of meetings, attendees from throughout the parish continued to stress the need to diversify and develop the local economy. Data gathered through this process revealed a desire among residents to increase economic opportunity to keep local youth from leaving the parish. The Emerging Industry Business Incubator enjoys broad public support, ranking second of six projects proposed for Lafourche Parish in the fifth round of meetings.

For Terrebonne Parish:

- **Primary Terracing Locations**
- **Location**: North of Lake
- **Property Owner**: Non-profit
- **LA SAFE Investment**: $10 million
- **Approx. $2 million created marsh
- **1235 acres / 300 acres of coastal restoration energy
- **1235 acres / 300 acres of Wild and Solar
- **Coastal Restoration
- **Lost Lands Tours; photo credit: Rush Jagoe
- **Community Benefits &**
- **ECONOM
- **Hospitality
- **Eco-Tourism
- **One-on-one mentoring &
- **EDUCATION, JOBS
- **RECREATION
- **TRANSPORTATION
- **Housing
- **Development;**
- **Lockport
- **Construction or renovation
- **program development;**
- **Up to $4 million
- **Government
- **College, Lafourche Parish
- **Fletcher Community
- **Commerce, South Louisiana
- **Lafourche Chamber of Commerce, South Louisiana
- **Small Business Development Corporation, South Louisiana
Resilient Housing Prototype

The Resilient Housing Prototype in Lafourche Parish is a Resilient Housing project that demonstrates an ideal development pattern for an area where the future flood risk is projected to remain relatively low. Areas with low flood risk are well positioned to receive population and economic growth as people retreat from higher risk locations. As populations migrate northward from south and central Lafourche Parish, medium-density, affordable residential developments should be prioritized in these receiver communities. This housing prototype will build density on a reduced footprint and will be resilient to flooding and wind damage. It will incorporate clean energy practices and conservation-minded components. Landscaping and shared green space will manage stormwater while adding beauty to the surrounding neighborhood. Roughly half the units will be market rate and the rest will be affordable to residents earning 20%, 30% and 50% of area median income. As people move from high-risk to low-risk areas, high quality mixed-use development is a key strategy to maintain housing affordability, revitalize neighborhoods and preserve green space. This project will serve as a model for resilient construction practices as Lafourche adapts to its changing future.

During the first round of meetings many attendees expressed concerns about population changes in the parish, declining home values and flood risk, noting an opportunity to plan and build for future conditions that included elevated flood risk throughout the parish. In the second round of meetings, residents continued to express interest in projects that included mixed-use development and responsible stormwater management. Additionally, nearly 80% of residents polled in the third round of meetings indicated that they would like to see affordable housing in their parish. Although this project did not rise to the top during public polling that was held in December, residents ranked it fourth out of six projects.