ReNew Orleans

Implementation Plan

ReNew Orleans has presented ambitious plans to regenerate Lake Forest Boulevard and the surrounding area. To see our plans become a reality - and transform the lives of the local community in the process - careful consideration has been given to the implementation of our proposals.

ReNew Orleans will ensure that local people are involved throughout. We firmly believe that the only way that our plans will work for the local community is if they are involved from day one. To do this, we have embedded consultation phases in our plans, inviting local community groups and non-governmental organisations to advise on the project throughout the duration of its works. This will ensure that our proposals work for the people, and that the community are well informed during construction works. Consultants and developers have a responsibility to ensure that all developments are safe, reliable, and benefit the community while also following lawful, ethical, and sustainable practices.

Funding will be sourced through a public-private partnership, involving private investors working with both federal and local government.

The whole development will take around 5-6 years.

Lake Forest Green Corridor	2yrs	* Government * Community groups * Civil organisations	$2mn
High-tech transportation	4yrs	* Government * Local council * Private sector	$4mn
Lake Forest Solar Microgrid	5yrs	* US Department of Energy * Entergy Corporation	$6mn
Community space and amphitheatre	2yrs	* Local government * Louisiana Office of Tourism * Community groups	$3mn
Climate-resilient, affordable housing	5yrs	* Government * Local council * Community groups	$5mn

Lake Forest Green Corridor

Demolition works	The proposal requires the existing roads to be completely demolished to make way for the boulevard's new configuration. Needs examination of site to inform accurate cost estimate.	~$10k
Bus roads	As a start-up, it may be possible to agree on a sponsorship deal with Kiacrete, where only installation costs are paid for.	$1.3mn
Bicycle path	Chosen materials are typical for bike paths, so installation costs should be fairly standard.	$500k
Pedestrian pavement	Grass paver might be slightly more expensive than regular paving material, but the aesthetic and tactile benefits of it outweigh the cost difference.	$990k
Road overpass	Three footbridges; one over each road intersection.	$600k
Solar-powered road lighting	One every 50m on both lanes. Installation and electircity usage is minimised as lighting is solar-powered.	$225k
Solar-powered ground lighting	Two lights every 10m for pedestrians.	$5.6k
Greenery	Transplant existing trees. Further native tree and shrub species should be added. Community tree planting project encouraged to keep costs down and engage locals.	£90k
Sub-soil drainage system	Requires closer examination of ground conditions for accurate cost estimation.	~$30k
Public toilets	Estimated $100k per toilet facility, with 5 cubicles per gender.	$200k
Playground	Small playground to accommodate around 20 children.	$30k
Drinking fountains	Around $1500 cost per fountain, with 6 fountains in total along the boulevard.	$9k

Lake Forest Green Corridor (cont.)

Phases of development

1. Divert traffic and demolish existing road. Fill in soil and construct drainage system to form greenery base layer and sustainable flood management network.
2. Build public toilets and playground areas. Install drinking fountains, streetlamps, and ground lighting
3. Begin reforestation of green sections with grass, trees, and shrubbery.
4. Build pedestrian overpasses over crosscutting roads. Get community involved in tree-planting.

Problems addressed

- New Orleans has a low emphasis on environmental sustainability – for example, New Orleans only recycles 3% of waste, which is 1/10th of the national average. Provide incentive the community to be more aware of the local environment.
- East New Orleans has an unappealing reputation of high crime rates, therefore creating a safer and more comfortable environment for the local residents, as well as building a more welcoming environment for outsiders, is another objective.

Funding

- Besides funding from the local council, private investors like Blackstone have charity schemes that invest in community projects to boost the local economy.

Considerations

- All developments regarding the public sector e.g., the waste management as well as the storm water drains will adhere to 'section 6 requirements for improvement'.
- Ensure that paths towards New Orleans East Hospital and other essential amenities are always available

High-tech Transportation

Phases of development

1. Route A: Read Forest Blvd. to CBD, main goal to connect our area with the city centre achieved (trial section).
2. Extend Route A to Elmwood, connects our area with a large shopping area for more job opportunities.
3. Route B: City Centre to Airport - connects our area and the rest of the city to the airport.
4. Extend Route B to serve other poorly-connected areas in the south east areas.
5. Overnight services introduced, subject to demand.
6. Review: continue looking for possible ways to improve and expand existing services, cut down existing bus routes that overlap with this system.

Problems addressed

- The lack of convenient transport into and out of New Orleans to city center, and hence the lack of access of better-paid jobs.
- Heavy reliance on motor vehicles.

Funding

Item	Quantity	Total cost
Electric buses	40	$20mn (+$800k electricity per yr)
New bus stops	10	$250k
Staff salary (drivers and maintenance)	100	$3.5mn per year ($35k av. salary).
Software	-	Further consultation required - work with start-up to demonstrate technology.

Considerations

- All new developments of pavements will be treated as public under '5.2.3. Development Containing Private Streets' including the cycle lanes.

Lake Forest Solar Microgrid

Phases of development

1. Preliminary works, including site investigation and preparation of site.
2. Investigation of transmission cable infrastructure and appropriate planning.
3. Installation of solar panels on top of local buildings.
4. Installation of local microgrid 'battery': storage system which can provide power source during night and act as a backup supply during hurricanes.
5. System testing: simulating a hurricane event to test whether back-up system is fully functional. Address any problems identified during this testing stage.

Problems addressed

- Poor energy resilience during storms and hurricanes.
- Green energy transition is supported - tackling the lack of renewable energy in New Orleans.

Funding

- Funding from US Department of Energy and Entergy Corp.
- Around $2.1mn/MW for community-/district-sized system (National Renewable Energy Laboratory, 2018). As cost of solar decreases with improvements in technology, the solar microgrid will become increasingly financially beneficial to the community's energy costs.

Considerations

- Planning rules state, under New Orleans City Council Planning 1.4 Statement of Purpose: 'all new developments must fall under key elements. General welfare, growth management, health and safety, land use and environment.' All developments follow these statements closely, ensuring they are met.

Community space and new amphitheatre

Phases of development

1. Construction of amphitheatre, using modular design and locally-sourced materials.
2. Installation of necessary infrastructure, such as lighting, sound systems, and landscaping.
3. Fit solar panels on the roof to power lighting.

Problems addressed

- Improve New Orleans' economy and self-sufficiency, while remaining within the resource limits of the site from the Living Building Challenges
- Create a stronger sense of community through promotion of the historic culture of jazz music in the city.

Funding

- The major sponsors of Jazz Fest could sponsor this part of the project, as it is a very promising intervention for its local culture. Public interim reports on earnings will be made early on, to ensure proper accountability of the site.

Considerations

- Preserving the culture of the local community: conducting background research to ensure that our interventions, such as focusing our development around New Orleans cultural and historical values, will be supported by the community.
- Developers will be required to have a community meeting with local citizens to ensure that all their needs are carefully considered.

Climate-resilient affordable housing

Phases of development

1. Demolition and preliminary works to prepare site for construction.
2. Prefabrication of housing units off-site, with transportation to site for installation.
3. Installation of 'green roof' design.
4. Resilient Retrofit program ongoing throughout.

Problems addressed

- Shortage of homes in New Orleans, particularly for those on lower incomes.
- Potential for damage during hurricane activity (over 850,000 homes in the city were destroyed during Hurricane Katrina).

Funding

- $100k per home unit, with up to 1000 homes. Total cost is around $12mn, including preliminary works to land.
- Specialised construction loans for infrastructure projects will be beneficial as they base their loan prices on the estimated costs of construction and material procurement rather than the estimated value of the property. This will ensure that the funding for affordable housing is met, even with the lower home value.

Considerations

- By working in phases and providing storm water drainage we comply with 'Section 5.1.3 Land Suitability' which states that our lots must be suitable for development e.g., not prone to flooding and to have no risk to future residents or visitors.
- Sustainable infrastructure through the use of reused shipping containers and secondary material choices such as Gluam or Novacem.

Further information

Project stakeholders

- Local community,
- Engineering companies (e.g. Arup or JACOBS),
- US Government,
- Private investors (such as NOLA Angel Network, Greater New Orleans, etc.),
- Sponsors (such as Coca-cola – Jazz Fest).

Other technical challenges

- Road closures during construction of all phases.
- Closure of water mains during new pipe installations will cause disruptions to the local community.
- Concrete pouring will need to be safely overseen and no contact must be made for 28 days to ensure proper hardening - closing of construction site and security required.
- Geotechnical analysis will have to be completed on the soil to ensure that foundations and piles will not be susceptible to ground movement.
- Sufficient clearance is required on the streets for HGVs being used to transport the pre-fabricated homes.
- Safety checks for re-use of derelict buildings in area, if safe plans can be amended to include their use.