



# Puerto Rico 127 Corridor Roadmap to Redevelopment

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# About the Roadmap to Redevelopment

The *Roadmap to Redevelopment* is a product of the [CDFA Brownfields Technical Assistance Program](#), which is funded through a grant from the U.S. Environmental Protection Agency (EPA). The program provides technical assistance to brownfields communities on redevelopment finance. For communities that require detailed, hands-on assistance for their redevelopment efforts, CDFA Brownfields Project Response Teams comprised of CDFA staff and technical assistance partners are available to conduct site visits and offer financing strategies. The goal of these visits is to provide communities with specific, actionable steps that can transform brownfields into economically-productive sites in accordance with the goals and plans of the community. CDFA will coordinate 36 Brownfields Project Response Teams over the life of the program.

The *Roadmap to Redevelopment* was developed through a multi-day process that included interviews with numerous stakeholders from the government, business, and non-profit sectors. The strategies provided are based on the input of development finance experts, CDFA staff, and the interests of stakeholder groups gathered during the Project Response Team site visit.

This report provides a framework for financing the cleanup and redevelopment of Puerto Rico's 127 Corridor based on the provided Eco-Industrial Zone master plan. Specifically, the CDFA team focused on providing suggestions for financing improvements to water/sewer, roadway, and electrical infrastructure to accommodate future eco-industrial users.

The report includes general suggestions on how to manage information regarding existing conditions and needed improvements. Such information is critical in understanding the opportunities and challenges of the PR127 Corridor. First and foremost, environmental assessments must be completed throughout the Corridor. Some properties may require minimal amounts of remediation and could be ready for redevelopment with relatively little effort. Other properties may need significant remediation and interested developers will require an understanding of the time and cost requirements of completing cleanup. Phase II Assessments will provide this critical information.

Equally important to developers and investors is understanding what infrastructure assets (water/sewer, roadway, and electrical) exist and what, if any, improvements are needed and/or planned. As the report discusses, investment interest in the PR 127 Corridor is very promising, but significant improvements are needed to provide future users with adequate electrical power, water/sewer service, and transportation. The extent and process for these improvements has not been determined. Planning for these improvements must begin by clearly mapping existing infrastructure assets.

Suggestions related to financing the needed improvements include use of federal program funds (e.g. EPA, appropriated Federal Emergency Management Agency (FEMA) Disaster Relief Funds) to catalyze investment. Traditional development finance tools including bonds, revolving loan funds, and public-private partnerships are also suggested as important components in assembling the capital to fund improvements. Efforts to attract private capital to the Corridor should include the use of tax credits and incentives. The PR 127 Corridor can be transformed into the Eco-Industrial Zone through organized leadership and a combination of many (or all) of the tools described herein.

# Background & History

Puerto Rico's 127 Corridor is located on the south coast of the island and belongs to the municipalities of Peñuelas and Guayanilla. This region was once a fertile agricultural area used to produce sugarcane and coffee. In the 1950s, oil refining companies and related industries began locating near the coast. The island's location made it an ideal refining station for South American oil imports to the U.S. throughout much of the 20th



*Aerial of PR 127 Corridor. Photo by Lizzie Herrera (Aerial photo courtesy of Aerofoto Internacional Puerto Rico)*

century. One of the largest petrochemical complexes in the world was once located in the Corridor. These businesses flourished for nearly three decades, but in the 1980s, U.S. tax policy changed, oil prices soared, and industries collapsed. Before long, the region was filled with abandoned industrial sites and disinvestment was widespread. What remains today is an expansive area of deficient infrastructure and contaminated land, dotted by a handful of operational sites primarily being used for energy production or fuel distribution.

Over time, these changes have wrought economic, environmental, and social challenges for the nearly 11,000 residents living in and adjacent to the brownfield-impacted neighborhoods of the PR 127 Corridor. Today, the unemployment rate is above 20 percent, and the poverty rate is at 57 percent. Outmigration is a problem for these communities, particularly among youth populations, and home ownership has declined significantly. Residents have historically suffered from a variety of health problems, likely attributable to contaminated soil, air, and water sources.<sup>1</sup>

In 2010, the U.S. EPA awarded a Brownfields Area Wide Planning grant to the non-profit regional consortium Desarrollo Integral del Sur, Inc. (DISUR) to create a reuse vision and implementation plan to cleanup and redevelop about 1,800 acres of the former petrochemical zone, an area comprising about 3,500 acres and some 42 different sites. The resulting reuse plan calls for an Eco-Industrial Zone, complete with utility-scale photovoltaic energy, resource recovery, a biofuel innovation hub, and a renewable energy powered industrial park. This vision was created by local residents and organizations and has since gained the support of the governor's office and Puerto Rico's Department of Economic Development and Commerce (DDEC).

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<sup>1</sup> Grau, M and Roriguez, J. Brownfields Area-Wide Planning Pilot Program Report on Area-Wide Infrastructure. September 2012. Retrieved from: [http://www.disurpr.com/downloads/BAWP\\_P3\\_RAWI%20\\_V.1.2-F091912.pdf](http://www.disurpr.com/downloads/BAWP_P3_RAWI%20_V.1.2-F091912.pdf)



## **Opportunity**

The PR 127 Corridor is unique in Puerto Rico because it is already zoned for industrial use and would not require a special process to rezone for industrial operations. Such land in Puerto Rico is scarce and this factor could be influential in attracting future private investment. However, attracting private investment will require complete environmental data and reliable infrastructure. At the request of DISUR and DDEC, this report investigates both remediation financing strategies and potential infrastructure financing opportunities, specifically related to hardening the water, road, and electrical infrastructure of the Corridor. The following paragraphs describe the existing conditions of these critical systems.

## **Water/Sewer**

The Report on Area-Wide Infrastructure prepared for DISUR under the EPA-funded Area-Wide Planning Program points to a lack of potable water and sewer infrastructure along most of the PR 127 Corridor. Puerto Rico's Aqueduct and Sewer Authority (PRASA) supplies potable water to 98 percent of the island's 3.8 million residents. PRASA also provides sanitary service to urban centers, but septic systems are common in rural areas. A lack of stormwater management throughout the PR 127 Corridor means heavy flooding during rains.

While PRASA says that all residents living in Penuelas and Guayanilla are connected to its water system, it is unknown whether there is sufficient supply of water for industrial use in this area, or what the source(s) might be. The capacity and existing usage of the aquifers north of the site have not been determined, and the integrity of the piping and other infrastructure is suspect. Significant water losses caused by leakage or breaks are widely prevalent on the island.

Many existing operations have self-supplied withdrawals.<sup>2</sup> Eco-Eléctrica Natural Gas Power Plant, one of the remaining industries on the south coast, operates a desalinization facility and is said to provide distilled water within the PR 127 Corridor. Costa Sur Steam Power Plant has a private water service and the only sewer system in the Corridor, but it is not clear whether the sewer system is being used. Additional assessment and planning is needed to determine the capacity of existing potential water sources, and the cost and time required to make them available to industrial users.

## **Roads**

Roadways throughout PR 127 Corridor include both short and long distance (cross island roads). Highway PR2 runs just north of the Corridor and connects the region to San Juan. PR 2 is also the only major access road connecting the Corridor to the western region of the island, and it floods during heavy rains, making it impassable. The other roadways throughout PR 127 are narrow and not designed to support heavy industrial traffic, yet large semi-trucks frequently pass through residential areas to pick up and deliver goods. Roadways are in need of repair and include no amenities for pedestrians, such as crosswalks or sidewalks. There are twelve bridges in the Corridor, most requiring significant restoration to be considered safe.

Puerto Rico's Highway Transportation Authority (PRHTA) is responsible for constructing, operating, and maintaining roads, highways, bridges, and all transit related facilities on the island. While road closures were at a very low rate of 1 percent early this year, PRHTA acknowledges that many projects are waiting in the queue. The immediate need for targeted, long-term recovery projects was approximately \$400M.

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<sup>2</sup> Grau, M and Roriguez, J. Brownfields Area-Wide Planning Pilot Program Report on Area-Wide Infrastructure. September 2012. Retrieved from: [http://www.disurpr.com/downloads/BAWP\\_P3\\_RAWI%20\\_V.1.2-F091912.pdf](http://www.disurpr.com/downloads/BAWP_P3_RAWI%20_V.1.2-F091912.pdf)

## **Electricity**

The Puerto Rico Electric Power Authority (PREPA) is the public corporation that provides power to all of the Commonwealth's residents. Two major power stations are located within PR 127: 1) Central Costa Sur Steam Power Plant uses both fuel bunker oil and natural gas and is owned by PREPA; and 2) Eco-Electrica Natural Gas Plant, which uses only natural gas and is privately owned. Some of the challenges currently facing PREPA in this region include interconnectivity problems for local customers, procurement of private fuel sources, high operation costs, and a general lack of transmission towers and lines running from the south coast to the north coast, resulting in poor power transfer. PREPA has plans to diversify its production model by investing in more dual system units that can burn oil or natural gas, and improving transmission and distribution reliability with the goal of supporting renewables.<sup>3</sup>

Hurricanes Irma and Maria struck the island in September 2017, causing further damage to infrastructure in the PR 127 Corridor and throughout the island, and clearly illustrate the vulnerability of the island's power system by leaving millions without power for months after the storms. The potential for such natural disasters emphasizes the urgency of hardening the island's electrical infrastructure.

## **Federal Emergency Management Agency (FEMA) Disaster Relief Funding**

In September 2017, hurricanes Irma and Maria caused island-wide devastation to critical infrastructure, commercial and industrial facilities, and housing, suddenly usurping many of the Commonwealth's resources for disaster recovery. In the wake of major natural disasters, FEMA's Disaster Relief Fund is expected to grant additional funding by Congress through supplemental appropriations.

Governor Ricardo Rossello requested federal assistance in the amount of \$94B following the destruction. The request, detailed by Build Back Better Puerto Rico<sup>4</sup>, includes supplemental funding requests from various federal agencies, including the U.S. EPA, Economic Development Administration (EDA), Department of Commerce, Department of Energy, and the Department of Housing and Urban Development (HUD). The funds would be distributed to multiple eligible agencies to be spent on rebuilding efforts. Administration of funds typically requires projects to be completed in four years. Based on the recent history of Hurricane Katrina (2005) and Hurricane Sandy (2012), it is expected that the congressional disaster recovery bills and appropriations will occur in stages. Understandably, the FEMA funds will be in demand across the island and will be prioritized according to urgency of need. To the extent that the future impact of projects to the economy and resiliency of the island will be considered, there is a strong case for utilizing a portion of FEMA funds to address the infrastructure deficiencies of the PR 127 Corridor. The strategies below include suggestions on how to use some of these funds to catalyze cleanup and redevelopment.

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<sup>3</sup> Grau, M and Roriguez, J. Brownfields Area-Wide Planning Pilot Program Report on Area-Wide Infrastructure. September 2012. Retrieved from: [http://www.disurpr.com/downloads/BAWP\\_P3\\_RAWI%20\\_V.1.2-F091912.pdf](http://www.disurpr.com/downloads/BAWP_P3_RAWI%20_V.1.2-F091912.pdf)

<sup>4</sup> Rossello, R. (November 2017) Request for Federal Assistance for Disaster Recovery Build Back Better Puerto Rico. Retrieved from: [https://media.noticel.com/o2com-noti-media-us-east-1/document\\_dev/2017/11/13/Build%20back%20better%20Puerto%20Rico\\_1510595877623\\_9313474\\_ver1.0.pdf](https://media.noticel.com/o2com-noti-media-us-east-1/document_dev/2017/11/13/Build%20back%20better%20Puerto%20Rico_1510595877623_9313474_ver1.0.pdf)

# Puerto Rico 127 Corridor Roadmap to Redevelopment

## Strategies

### Part I: Assessing the Environmental Contamination throughout PR 127 Corridor

The heavy industrial use of the Corridor has marked the coastal landscape with a vast number of tank farms, towers, and industrial ponds. Under the Area Wide Planning grant, DISUR completed Phase I environmental assessments on 11 of 16 sites targeted for cleanup. The Phase I reports indicate the likely presence of many petroleum related contaminants, PCBs, lead-based paint, and hazardous materials, including asbestos. It is probable that a significant amount of cleanup is needed at many sites.

However, efforts should be made to determine which sites, and portions of sites, are relatively uncontaminated or require the least amount of investment to be made reusable. There may be large swaths of land that have little or no contamination that (assuming utilities and other infrastructure are available) could be developed immediately. More precise information is needed to be able to prioritize cleanup efforts and eventually market properties. Potential developers will require a sense of time and cost when considering investment in any project.



*Former gas station in PR 127 corridor*

#### i. Complete Phase II Assessments

Phase II environmental assessments involve sampling and analysis to determine the presence, areal extent, concentration, and potential impact of contaminants in environmental media: soil, water, groundwater, and air. When possible, the Phase II assessments should be arranged through an agreement with the property owner. In the case of an absent or uncooperative property owner, Puerto Rico's Environmental Quality Board (EQB) or U.S. EPA has the authority to compel the owners, under RCRA or CERCLA or their state equivalents, to perform the necessary sampling, or to perform the work itself and, frequently, recover its response costs. The post-hurricane resiliency efforts and momentum being gained for redevelopment of the Corridor should encourage EQB to be aggressive in enforcing cleanup of high-priority properties.

DISUR currently has limited funding available for completing additional environmental assessments through its EPA Coalition Assessment Grant. Additional requests can be made to EPA for additional funding to complete the Phase II assessments, but every effort should first be made to spend existing funds.

DISUR could request a portion of FEMA proceeds to establish a fund for assessing properties in the PR 127 Corridor. As a redevelopment area that affects both the economy and future resiliency of the island, the Corridor cleanup will be a critical project in the Commonwealth's ability to attract private sector investment.

i. Publicize RCRA Corrective Action Reports on Properties

As mentioned previously, four properties within the PR 127 Corridor are under RCRA corrective action. Of these properties, one has completed remediation and received clean closure status. The other three properties are at various stages of RCRA Facility Investigation (RFI) and/or implementing the RFI Work Plan. Publicizing this information will demonstrate a transparent enforcement process to the public and to nearby property owners and should encourage them to comply with assessment and remediation efforts.

## Part II: Identifying Cleanup Funding

As mentioned previously, the extent and cost of cleanup for properties throughout the Corridor will only be determined once additional data has been collected via Phase II environmental assessments, and remediation plans have been drafted in accordance with desired end use. It is assumed that for many properties, the cleanup costs will be significant and could deter potential investors from purchasing and redeveloping properties. It is recommended that DISUR and DDEC be proactive in identifying sources of financing that can be used to remediate the properties, thereby lessening the financial burden on future developers.

i. Establish a Revolving Loan Fund for Cleanup

DISUR has applied for an EPA Revolving Loan Fund (RLF) in the amount of \$1.2M which would provide no/low interest loans to private property owners for cleanup purposes. Such early risk capital will be valuable in attracting private investment. The RLF awards are highly competitive, and support from the Governor's office is essential. Successful spending of existing EPA assessment funds should strengthen the application.

ii. Make Subgrants Available to Transformative Redevelopment Projects

If awarded, the EPA RLF allows for a certain ratio of subgrants that can be given out to assist with cleanup funding. These subgrants could be strategically awarded to redevelopment projects that are especially catalytic for the PR 127 Corridor.

iii. Investigate Cost Recovery from Former Site Owners

For sites polluted prior to the 1980s, insurance policies may cover the costs of environmental remediation. In some cases, cleanup costs may be too low for insurance recovery to be worth pursuing, as sizeable deductibles (up to \$1M) are common for most insurance cost recovery policies. Once more information is obtained for the properties and cleanup costs have been estimated, DISUR or DDEC should consider legally pursuing the former polluting site owners to compel them to remediate the properties.



*Above ground storage tanks in the PR 127 Corridor*

## Part III: Financing Infrastructure Improvements

This section explores infrastructure financing strategies for the PR 127 Corridor and provides both general suggestions related to organization and information sharing, as well as specific financing strategies for water/sewer, electrical, and roadway infrastructure.

### General Suggestions:

i. Appoint a Redevelopment Agency to Coordinate Redevelopment Efforts

One agency, or task force, should be in charge of managing information and coordinating efforts for the PR 127 Corridor. Clearly this area is a priority for DISUR and for DDEC. If the Governor's office is also prioritizing this area for cleanup and redevelopment, the Governor may be willing to recognize PR 127 as a special project area and give authority to a single management group or redevelopment agency with enabling legislation. This entity would play a critical role in gathering and sharing information related to the environmental conditions, infrastructure, and future improvements within the Corridor, and developing and overseeing the implementation of the path forward. This entity should lead coordination efforts across multiple state agencies and provide valued input on needed infrastructure improvements within the PR 127 Corridor. The entity might also be responsible for fielding inquiries from interested private sector investors.

ii. Build Map of Existing Infrastructure Assets

Although the Report on Area-Wide Infrastructure<sup>5</sup> broadly presents existing conditions and investment needs for water, roadways, and electricity, more information is needed regarding the existing capacity of the current systems to serve future users. For example, stakeholders and officials expressed apprehension about existing water supply, but information on the current capacity of the system is vague. Specific data is needed to determine existing supply and make plans for improvements. This information is critical to understand what investments are needed, how much they will cost, and how long they will take to implement.

There is also much apprehension about connecting new industries to the electrical grid. PREPA has indicated that renewables will be included in the updated Integrated Resource Plan, but that the capacity of the existing infrastructure must be evaluated and brought to adequate capacity. PREPA is said to have already made power purchase agreements (PPAs) with some renewable companies. It is unclear what stage of development these are under and what improvements are being made to accommodate them. Any intermittency in the power grid will be an obstacle to connecting renewable energy sources in the future.

Future industrial users should be able to readily connect to adequate supplies of water and electricity without incurring substantial delays or costs to get access to utilities. Clear information on what the existing water infrastructure and electrical power systems will support will lead to a better understanding of what, if any, industries can be accommodated presently and what improvements will need to be made in the future.

iii. Evaluate Potential for Revolving Loan Fund (RLF) for High-Priority Infrastructure Projects

DISUR (or the Puerto Rico Environmental Quality Board, or other applicable agency) should investigate opportunities to capitalize a revolving loan fund (RLF) for redevelopment projects within the PR-127 Corridor. As a self-replenishing pool of money, an RLF can provide gap funding to multiple projects over time, utilizing interest and principal payments on old loans to issue new ones.

Most revolving loan funds have at least one local public source for capitalization combined with other sources. State and local governments often use one or more of the following to capitalize an RLF: tax set asides, general obligation bonds, direct appropriations from the state legislature, annual dues from participating counties or municipalities, and funds directed from the state lottery.

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<sup>5</sup> The report was task 3 of the Area-Wide Planning Pilot Program funded by EPA and provides an assessment of several infrastructure systems in PR127 including electric, roadways, ports, telecommunications, water, and industrial infrastructure: <sup>5</sup> Grau, M and Roriguez, J. Brownfields Area-Wide Planning Pilot Program Report on Area-Wide Infrastructure. September 2012. Retrieved from: [http://www.disurpr.com/downloads/BAWP\\_P3\\_RAWI%20\\_V.1.2-F091912.pdf](http://www.disurpr.com/downloads/BAWP_P3_RAWI%20_V.1.2-F091912.pdf)

The federal government is another common source of capitalization. The RLF could be capitalized using a portion of the FEMA funds. Requests could also be made to Housing and Urban Development (via Community Development Block Grants) or the Department of Commerce (via the Economic Development Administration). Each of these funders will restrict the use of the RLF to fit within the eligible activities of the respective programs.

Ideally, the RLF would be available to multiple agencies as well as private developers for projects that demonstrate significant economic benefits to the Corridor. Funds can be set aside for renewables, bioeconomy projects, and other targeted industries.

## Water Infrastructure Financing:

### i. Create a Public-Private Partnership (P3) for the PR 127 Corridor

A limited public-private partnership (P3) should be explored for the PR 127 Corridor. A P3 is an arrangement where a government agency contracts with a private partner to finance, renovate, construct, operate, maintain, and/or manage a facility or system that provides a public service or benefit.<sup>6</sup> In this case, the government (or PRASA) could enter into a partnership with a private company to provide the needed water and wastewater infrastructure improvements. As long as the private partner is assured that the payments coming in from the government and users are reliable, they can afford to be patient in receiving their return-on-investment. By establishing the PR 127 Corridor as a separate water district (3500 acres), the P3 can limit its operation to a manageable area. Ratepayers already exist within the industrial zone, and stakeholders indicated that they would be willing to pay a higher rate to receive a better level of water service. As it is, rates are already high (and rising) and service is poor to nonexistent.

P3s vary widely in structure and terms; modeling various revenue sharing options and rate structures can demonstrate how both parties can achieve the desired return. The government should issue an RFP to solicit interest from appropriate parties.

### ii. Consider Issuance of Bonds Using Credit Enhancement

Despite challenges with Puerto Rico's downgraded credit rating, and the low credit rating of PREPA and PRASA, the Commonwealth could consider issuing bonds to finance the water infrastructure improvements in the PR 127 Corridor. This would only work with some form of credit enhancement; for example, a portion of the FEMA disaster resiliency funds could be used for such a purpose. Over time, the Commonwealth can improve its credit worthiness and may recover to an investment grade rating.

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<sup>6</sup>Council of Development Finance Agencies. (n.d.) Retrieved from: <https://www.cdfa.net/cdfa/cdfaweb.nsf/resourcecenters/p3.html>

## Electrical Infrastructure Financing

### i. Coordinate Efforts with Existing Working Groups

The electrical infrastructure deficiencies facing Puerto Rico are an island-wide problem and will require a holistic approach to repair, modernize, and harden the existing grid. Following last year's hurricanes, Smart Electric Power Alliance (SEPA), a non-profit organization promoting the utilization of clean energy, released a report that assessed the island-wide damage to the electrical system and proposed rebuild recommendations to harden the grid and implement renewable energy. Lead by Puerto Rico Energy Resiliency Working Group with input from Governors Ricardo Rossello (PR) and Andrew Cuomo (NY), the report includes specific assessments and recommendations for power plants, transmission, distribution, substations, and operations, including those located in the PR 127 Corridor.<sup>7</sup> It's unclear how many, if any, of these recommendations are being incorporated into the current "Build Back Better" efforts being undertaken by PREPA. Efforts toward planning for electrical infrastructure improvements should be informed by and coordinated with PREPA and existing working groups to prioritize repairs and enhancements to the grid.

### ii. Develop a Pilot Project for Microgrids and Renewables in PR 127 Corridor

A microgrid is a network of users (interconnected loads and distributed energy resources) within clearly defined electrical boundaries that acts as a single controllable entity with respect to the grid. A microgrid can connect and disconnect from the grid to enable it to operate in both grid connected or island mode.<sup>8</sup> One suggestion for hardening the infrastructure throughout the PR 127 Corridor would be to create a pilot project to implement microgrids and renewable energy projects within the 3500-acre zone. Representatives from SEPA indicated that there is a potential market for microgrid operations on the island, but that efforts must be coordinated island-wide to ensure proper performance. Stakeholder opinion indicated that companies would be willing to pay more for reliable electrical service; locating power generation close to the load would provide that amenity to future industrial users. For some contaminated properties in the PR 127 Corridor, capping the land (which requires only moderate remediation activity) and making it available to renewable energy companies could be a relatively low-cost option for redevelopment, and one that fits within the overall goals of the re-use plan.

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<sup>7</sup> Puerto Rico Energy Resiliency Working Group. (December 2017). Build Back Better: Reimagining and Strengthening the Power Grid of Puerto. Retrieved from: Rico[https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/PRERWG\\_Report\\_PR\\_Grid\\_Resiliency\\_Report.pdf](https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/PRERWG_Report_PR_Grid_Resiliency_Report.pdf)

<sup>8</sup> Puerto Rico Energy Resiliency Working Group. (December 2017). Build Back Better: Reimagining and Strengthening the Power Grid of Puerto. Retrieved from: Rico[https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/PRERWG\\_Report\\_PR\\_Grid\\_Resiliency\\_Report.pdf](https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/PRERWG_Report_PR_Grid_Resiliency_Report.pdf)

## Roadway Infrastructure Financing

### i. Petition PRHTA to Be Included in Long-Range Transportation Plan

PRHTA annually makes a request to the federal Department of Transportation to fund projects approved by the local metropolitan planning organization (MPO) as part of the long-range transportation plan. The MPO includes a public policy committee, a technical oversight committee, and public participation component.<sup>9</sup> Mayors from Puerto Rico's urbanized areas with populations of less than 200,000 (including Penuelas and Guayanilla) are included in the planning process and have some input into which projects get accepted. Efforts should be made to prioritize roadway improvements throughout the PR 127 Corridor, with significant involvement and coordination with the Mayors of Penuelas and Guayanilla. The potential island-wide economic impacts of the PR 127 Corridor redevelopment should qualify its inclusion in the long-range plan.

### ii. Consider Future Utilization of Tax Increment Financing (TIF)

Tax-increment financing (TIF) allows local governments to invest in infrastructure and other improvements and pay for them by capturing the increase in property tax revenues generated by the enhancements. Once established, the TIF district will collect the incremental taxes to be used toward eligible projects. A TIF district in the PR-127 Corridor could be used to finance roadway and other infrastructure improvements. TIF districts should be established while base values are low to maximize the revenue capture.

## Part IV: Attracting Industry and Leveraging Private Investment

There seems to be substantial private sector interest in the PR 127 Corridor for locating new or expanding existing industries. Especially notable are companies interested in operating bio-based economic projects, or bioeconomy projects. This term is used to refer to “those parts of the economy that use renewable biological resources from land and sea- such as crops, forests, fish, animals, and micro-organisms to produce food, materials, and energy.”<sup>10</sup> The goals of a bioeconomy include sustainability through reduced use of natural resources, energy, and reduced waste products while protecting the environment. These goals fit well within the objectives of the reuse plan for the PR127 Corridor as one that emphasizes renewable energy, resource recovery, and biofuels.

Existing industries in the Corridor include energy producers (oil and gas), a recycling facility, and a commercial-scale renewable energy company, among others. Owners who want to expand cite difficulties in funding, challenges of meeting EPA cleanup regulations, and an inadequate electrical grid as obstacles to growth. The stakeholder consensus was that if incentives could be provided and the processes streamlined, more companies would invest in the PR 127 Corridor. The following suggestions include programs and incentives to attract private investment.

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<sup>9</sup> Atkins Caribe, LLC. (January 2012). Puerto Rico 2040 Long Range Multimodal Transportation Plans. Retrieved from: [http://www.dtop.gov.pr/pdf/Public\\_Involvement\\_Plan\\_for\\_LRTP2040.pdf](http://www.dtop.gov.pr/pdf/Public_Involvement_Plan_for_LRTP2040.pdf)

<sup>10</sup> European Commission. (n.d.) Research and Innovation. Retrieved from: <https://ec.europa.eu/research/bioeconomy/index.cfm>

i. Utilize New Markets Tax Credits (NMTC)

The census tracts throughout the PR 127 Corridor qualify to receive NMTC investments. The NMTC program incentivizes economic growth through the use of tax credits that attract private investment to distressed communities. The NMTC Program can potentially generate a substantial amount of private equity (20-30 percent of project costs) for projects located in the PR 127 Corridor. It is intended to be used to fill financing gaps on a project and requires that 80 percent of the total project cost be funded through other sources, including conventional lending or certain bond financing, equity from the project owner or investors, other government or public subsidy (grants/loans, etc.), and private donations and/or fundraising.

Most commercial and industrial projects in qualifying census tracts are eligible. The NMTCs are awarded to CDEs based on a variety of criteria, one of which includes financing projects resulting in significant community impacts.<sup>11</sup> CDEs often keep a pipeline of ready projects that exhibit characteristics consistent with such impacts. DDEC should begin identifying Community Development Entities (CDEs) whose mission (e.g., industrial, renewable energy, resiliency, and/or bioeconomy projects) and geographic footprint are a match with the PR 127 Corridor. Historically, Puerto Rico and other U.S. territories have been underserved by NMTC investments, and this will be a positive factor that may make projects in the PR 127 Corridor more attractive to national CDEs looking to invest in impactful projects.

ii. Market PR 127 Corridor as a Qualified Opportunity Zone

The Tax Cuts and Jobs Act (HR 1) that was signed into law late in 2017 creates a new tax incentive to attract capital to low-income census tract areas, allowing investors to defer tax on capital gains if the proceeds are invested in a qualified Opportunity Fund which is used to support new or existing business activities within the zone. The bill includes a provision that allows all census tracts in Puerto Rico that are low-income to be designated as Qualified Opportunity Zones, which includes the majority of the island. Many investors are willing to provide capital to projects but lack the wherewithal to locate and follow through on opportunities in needy communities. The new Opportunity Funds will democratize economic development by allowing a broad array of investors throughout the county to pool resources and mitigate risk, increasing the scale of investments going into underserved areas. When layered with the Commonwealth's existing incentives packages<sup>12</sup> for business and industry, this designation becomes quite attractive to investors. To encourage investment in PR 127 Corridor specifically, the incentives process should be streamlined and/or enhanced for businesses that fit the desired redevelopment criteria.

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<sup>11</sup> CDFI Fund. (n.d.) New Markets Tax Credit Program. Retrieved from: <https://www.cdfifund.gov/programs-training/Programs/new-markets-tax-credit/Pages/default.aspx>

<sup>12</sup> Puerto Rico Industrial Development Company. (n.d.) Incentives. Retrieved from: <http://www.pridco.com/why-puerto-rico/incentives/Pages/default.aspx>.

iii. Maximize Use of State and Local Tax Incentives

Puerto Rico offers a highly attractive incentives packages that include various tax exemptions and special deductions for certain businesses locating or expanding in Puerto Rico. These include a fixed corporate income tax rate (4 or 8 percent) – one of the lowest in comparison with any U.S. jurisdiction – various tax exemptions and special deductions, training expenses reimbursement and special tax treatment for pioneer activities (1 percent or lower income tax rate). A 60 percent tax exemption is also granted on volume of business tax, or municipal license taxes, and up to 75 percent exemption is available to small and medium size businesses.<sup>13</sup> Municipalities can grant additional incentives such as exemptions on real property, personal property, construction, and sales tax. The municipalities of Penuelas and Guayanilla should consider whether additional incentives might be offered to new businesses for greater long term economic health of the region.

iv. Issue a Request for Proposals (RFP) for Shovel Ready Sites

Once additional environmental data has been gathered, DDEC should consider issuing an RFP for sites that have little to no contamination and are ready to transfer ownership. The RFP should be guided by the reuse plan for the Eco-Industrial Zone. However, any opportunistic proposals should be considered for their potential to generate economic activity and catalyze redevelopment efforts, provided they do not compromise the overarching goals of the community plan. Priority may be given to companies that have shown persistent interest in locating or expanding to suitable properties within the PR 127 Corridor.

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<sup>13</sup> Puerto Rico Industrial Development Company. (n.d.) Incentives. Retrieved from: <http://www.pridco.com/why-puerto-rico/incentives/Pages/default.aspx>.

# Puerto Rico 127 Corridor Roadmap to Redevelopment

## Additional Resources

CDFA Brownfields Financing Toolkit |

[http://www.cdfa.net/cdfa/cdfaweb.nsf/ord/201502\\_BF\\_Toolkit/\\$file/CDFA%20Brownfields%20Financing%20Toolkit%2002.02.15.pdf](http://www.cdfa.net/cdfa/cdfaweb.nsf/ord/201502_BF_Toolkit/$file/CDFA%20Brownfields%20Financing%20Toolkit%2002.02.15.pdf)

CDFA Online Resource Database |

<http://www.cdfa.net/cdfa/cdfaweb.nsf/ordsearch.html>

CDFA Advanced Bond Finance Reference Guide |

<https://www.cdfa.net/cdfa/store2.nsf/browse.html?open&so=popularity>

Economic Development Administration Funding Opportunities |

<https://www.eda.gov/funding-opportunities/index.htm>

Smart Electric Power Alliance |

<https://sepapower.org/puertorico/>

CDFA Opportunity Zone Resource Center |

<https://www.cdfa.net/cdfa/cdfaweb.nsf/resourcecenters/iioa1.html>

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Puerto Rico Aqueduct and Sewer  
Authority  
Puerto Rico Electric Power Authority  
Puerto Rico Environmental Quality  
Board  
Puerto Rico Highway Transportation  
Authority  
Puerto Rico Planning Board  
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