

# SOUTHERN PUERTO RICO ECONOMIC DEVELOPMENT DISTRICT

**Puerto Rico's Inaugural Economic Development District**

**Planning for Regional Collaboration, Transformation, Capacity Building and Resilience**

**2021 – 2026 Comprehensive Economic Development Strategy**



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## ACKNOWLEDGEMENTS

It has been an honor and a privilege to support the efforts leading to the development and drafting of the Southern Puerto Rico Economic Development District Comprehensive Economic Development Strategic plan (SPREDD-CEDS). It is important to recognize that this was not a one person or one entity effort, but a collaborative and iterative initiative between public and private stakeholders and partners who dedicated time and effort to craft the 2021 SPREDD-CEDS. At Titín Foundation (TF) we pride ourselves with having an amazing and dedicated staff who goes above and beyond to make things happen. I would like to stress my gratitude to Hazel Colón, Programs Director at Titín Foundation, who pushed the envelope, taking a bold transformational idea with historic implications, and led it through implementation. TF is extremely grateful for the creativeness and passion invested in this initiative by our Program's Director. This work will resonate on improving the quality of life of the residents of the Southern Puerto Rico Economic Development District Region. I would also like to recognize the Economic Development Administration (EDA) Philadelphia Regional Office, Regional Administrator, Linda Cruz-Carnall, Matthew Suchodolski, Economic Development Integrator (EDI), Juan Bauzá, Economic Development Representative (EDR-PR-USVI), and Zulma Velazquez, Economic Development Specialist (EDS-PR) for their collaboration, invaluable guidance, and counsel throughout this process.

Special thanks to the members of the Strategic Leadership Team (SLT), University of Puerto Rico, Ponce, Casa Grande, Invest Puerto Rico, CIRACET, EDA, and the support of FEMA Community Planning and Capacity Building who, in a historic collaboration, contributed to an inclusive process gathering relevant data for the crafting of this first localized "Comprehensive Economic Development Strategy for Southern Puerto Rico" (2021 Pilot SPREDD-CEDS). This regionally driven economic development document focuses on the municipalities of Guánica, Yauco, Guayanilla, Peñuelas, Ponce, and Juana Díaz.

The work behind drafting this document has been dense, extremely challenging, yet immensely gratifying. It has been a coordinated effort of multiple players at the local level in partnership with local government, federal government, private sector as well as the nonprofit sector working together. The SLT, serving as a CEDS Committee, worked in close collaboration with the International Economic Development Council (IEDC), the University of Puerto Rico in Ponce, EDA, community leaders, various industries, education providers, workforce boards, non-profit organizations, individuals, and public sector representatives and engaged in meaningful conversations and debates on regional economic planning, goals, and coherent strategies.

This document is one of several requirements needed to complete an Economic Development District (EDD) designation package. This SPREDD-CEDS is a living planning document and an integral part of the ongoing efforts leading to the Southern Puerto Rico Economic Development District (SPREDD) designation request. This first step, having a regional CEDS approved by EDA, is a significant step forward to creating the first-ever EDD in Puerto Rico. The federal designation will strengthen and revitalize a region within Puerto Rico which holds tremendous potential but is also burdened with significant challenges and devastating setbacks following recent hurricanes and earthquakes.

Countless hours have been invested in this planning process geared towards gathering and capturing community input in the areas of capacity building, economic prosperity, and enhanced economic resilience for Puerto Rico's southern region in preparation for future disasters. Since the beginning of this

process, in April 2020, and despite the challenges brought about by the earthquakes, coupled with the COVID-19 disruption on social gatherings and communication gaps, the SLT, along with stakeholders, was able to effectively move through these hurdles and accomplish this major milestone of producing the Pilot SPREDD-CEDS.

This initiative was originally conceptualized in the Puerto Rico Economic and Disaster Recovery Plan “Transformation in the Wake of Disaster 2018” and referenced in multiple courses of action within the plan. Many pre-planning efforts strategizing and socializing how to implement such an ambitious project were made prior to engaging in the development of this Pilot SPREDD-CEDS. On January 23, 2020, EDA Regional Administrator, Linda Cruz-Carnall visited the Southern Region amid the earthquakes and presented the concept of a Pilot EDD to the Mayor of Ponce, as an opportunity for regional revitalization. Following this meeting, Hazel Colón (TF-PD) and Juan Bauzá (EDR-PR-USVI) co-developed the programmatic design for this Pilot SPREDD-CEDS and EDD initiative. Following the project design, EDR-PR-USVI made a request to IEDC for an Economic Development Assessment Team (EDAT), under their technical assistance grant with EDA, to conduct a SWOT analysis of the region, TF then led the stakeholder engagement efforts.



*Left to right; Mayor of Juana Díaz, Ramón Hernandez Torres, Prof. Grisobelle Virella, Assistant to the Rector for External Resources of UPR Ponce, Hazel Colón, Programs Director of Titín Foundation, Former Mayor of Ponce, María Eloisa Melendez Altieri, Dr. Tessie H. Cruz Rivera, UPR Ponce Rector, Zulma Velázquez, Economic Development Specialist EDA and Juan Bauzá Economic Development Representative and Recovery Support Function Field Coordinator EDA.*

A conference call was held on April 20<sup>th</sup> to introduce the Southern Puerto Rico Pilot initiative to the 6 municipalities of the region, and the central government. On April 24, 2020, a kick-off meeting was held, which was attended by approximately 25 people, representing the federal and municipal governments, non-profits organizations, and the academic sector. Organizing specific working committees began, with the continuous assistance of the Economic Recovery Support Function (Econ RSF). After this meeting, the SPREDD Steering Committee, IEDC, and the Econ RSF prepared a series of questionnaires, in Spanish and English, that were eventually used to obtain input from key industry stakeholders, making this the first attempt of a virtual CEDS stakeholder consultation conducted virtually and completely in Spanish. This was one of the most critical phases regarding this regional planning process. On July 10, a presentation on the objectives, process, and benefits of an EDD designation was given to the 6 municipalities in the region.

A Stakeholder's Event was conducted virtually on January 29, 2021, where 11 industries from the 6 municipalities were represented. During the session, the attendees were divided into focus groups to discuss and identify their top priorities. Stakeholder interview sessions were facilitated by UPR professors, who later provided summary reports of the collected data. The questionnaires were also distributed to all stakeholders, and reasonable time was given for them to respond.

In addition, the goals, progress, and initiatives were shared and made available in both Spanish and English on the webpage <https://www.eddpr.org>. This webpage served as a transparency portal, a document repository, and for the purpose of engaging the community and obtaining its feedback. Questionnaires were also made available on the website to maintain an open and inclusive process 24/7 to address potential gaps in community participation due to COVID-19 restrictions and social distancing.

On February 23, 2021, a public Spanish outreach campaign was launched by TF, "Apostemos por el Sur", including social media, billboards, and public service ads. TF also conducted multiple interviews that were featured in print, digital, radio, and television media introducing the Pilot EDD initiative and encouraging public participation by filling out the questionnaires through the website.

A second in-person presentation to the 6 municipalities took place on March 31, 2021, at the University of Puerto Rico in Ponce. The presentation was followed by individual interviews conducted by IEDC's consultants, in which the participating municipalities had the opportunity to bring their input regarding their special needs and specific initiatives for economic development in their region.

Once the first draft of 2021 SPREDD-CEDS was completed in May 2021, it underwent a curation process to ensure that it met all the compliance requirements for EDA approval before being placed on the webpage to attract other interested parties to review it and to provide comments on the prioritized initiatives and projects.

Finally, I am deeply grateful and appreciative for the insight, expertise, and assistance given by all those who, in one way or another, helped in crafting this document. TF looks forward to working collaboratively on the key projects and actions to accomplish the goals and objectives set forth herein to create a more resilient region for the 6 municipalities that have come together to form Puerto Rico's inaugural Pilot EDD. Regional stakeholders have been and will continue to be critical and instrumental in the development of the plan's vision, goals, and action plans, today and into the future.

Certainly, this Pilot SPREDD-CEDS will provide the blueprint by which all sectors, working collaboratively, will be able to create the environment for regional economic prosperity, good and well paid jobs, and a more diverse economy that can spur economic growth and resiliency.

With great satisfaction I am proud to say that no stone has been left unturned to ensure full and inclusive participation from all stakeholders of the municipalities of Guánica, Guayanilla, Juana Díaz, Peñuelas, Ponce, and Yauco. Access to participate in the creation of this regional plan was open to all, and because of that, this SPREDD-CEDS is truly the Region's Plan.



-Sofia Martinez-Alvarez  
Executive Director  
Titín Foundation

## ABBREVIATIONS

ACS	American Community Survey
BLS	U.S. Bureau of Labor Statistics
DEDC	Puerto Rico Department of Economic Development and Commerce
CEDS	Comprehensive Economic Development Strategy
CFC	Controlled Foreign Corporation
COA	Course of Action set forth in the Recovery Plan
COR3	Central Office for Recovery, Reconstruction and Resiliency
CPCB	Community Planning and Capacity Building
CDBG-DR	Community Development Block Grant – Disaster Recovery
ECN	Economic Course of Action
EIA	U.S. Energy Information Administration
EDA	U.S. Economic Development Administration
EDAP	Economic Development Action Plan
EDAT	Economic Development Assessment Team
EDD	Economic Development District
FCC	Federal Communications Commission
FOMB	Financial Oversight and Management Board of Puerto Rico
FTZ	Foreign Trade Zone
GDB-EAI	Government Development Bank for Puerto Rico Economic Activity Index
GDP	Gross Domestic Product
GPR	Government of Puerto Rico
HSOAC	Homeland Security Operational Analysis Center
IRC	Internal Revenue Code of the United States
LFPR	Labor Force Participation Rate
LQ	Location Quotient
MUN	Municipality
NAICS	North American Industry Classification System
NFTE	National Foundation for Teaching Entrepreneurship
PBPA	Point Blank Protective Apparel
PHSU	Ponce Health Sciences University
PREPA	Puerto Rico Electric Power Authority
PRI	Ponce Research Institute
PRIDCO	Puerto Rico Industrial Development Company
PROMESA	Puerto Rico Oversight, Management, and Economic Stability Act
QCEW	Quarterly Census of Employment and Wages from the U.S. Bureau of Labor Statistics
QOZ	Qualified Opportunity Zone
SMR	Small Modular Reactor
SPREDD	Southern Puerto Rico Economic Development District
TCJA	Tax Cuts and Jobs Act
WIOA	Workforce Innovation and Opportunity Act

## ALIGNMENT WITH OTHER PLANS

In the aftermath of Hurricanes Irma and María, the Government of Puerto Rico, with numerous federal partners and local stakeholders, worked to compile “Transformation and Innovation in the Wake of Devastation: An Economic and Disaster Recovery Plan for Puerto Rico” (the Recovery Plan), which is a Recovery Plan for Puerto Rico. In accordance with the Bipartisan Budget Act of 2018, the Recovery Plan was submitted to Congress on August 8, 2018.

The vision for transforming Puerto Rico set forth in the Recovery Plan is grounded in the present, taking into account a variety of preexisting factors that will continue to challenge the Island and its citizens in the years ahead. These include Puerto Rico’s location and geography, changing demographics, the economic trends and fiscal conditions prior to the hurricanes, and the limited maintenance of critical infrastructure. This recovery effort represents more than simply the effort to physically repair and reconstruct the damage caused by the hurricanes; it is also an opportunity to implement the social, governmental, fiscal, and economic reforms that will lead to a 21st-century Puerto Rico.



Figure 1: Puerto Rico’s Recovery Plan

The Recovery Plan also incorporates several plans, such as (former) Governor Ricardo Rosselló’s Plan for Puerto Rico; the New Fiscal Plan for Puerto Rico: Restoring Growth and Prosperity, which was certified by the Financial Oversight and Management Board; and the CDBG-DR Action Plan approved on July 30, 2018.

<b>CPCB 1</b>	Disaster Preparedness Data Analysis and Decision Support Capability
<b>CPCB 8</b>	Strengthening Emergency Management Capacity at Municipalities
<b>CPCB 9</b>	Coordinated Local Recovery Planning Process
<b>CPCB 11</b>	Cross-Sector Coordination in Infrastructure and Implementation
<b>CPCB 12</b>	Capacity Building for Financial Management
<b>CPCB 14</b>	Building Grant Writing Capacity
<b>CPCB 15</b>	Strengthen Local Nonprofit and NGO Involvement in Disaster Recovery
<b>ECN 2</b>	Implement Workforce Development Programs
<b>ECN 5</b>	Improve Retention of Educated Workforce Through Policy Change
<b>ECN 7</b>	Create Research Centers and Partnerships
<b>ECN 8</b>	Define and Develop Economic Development Zones
<b>ECN 23</b>	Implement Job Creation Initiative
<b>ECN 24</b>	Revitalize the PR-127 Petrochemical Corridor in Guayanilla - Peñuelas
<b>MUN 2</b>	Create Regional Economic Development Plans

Table 1: COAs impacted by EDD formation.

The Recovery Plan includes 276 Courses of Action (COAs) based on numerous recovery components such as Communications, Housing, Natural and Cultural Resources, Health and Social Services, Energy, Water,

Economic and others. EDA's investments in Puerto Rico post-María all address various COAs. The formation of an EDD specifically addresses the COAs set forth in Table 1 in whole or in part.

In addition to the direct impacts of the COAs in Table 1 formation of SPREDD is also likely to indirectly advance many COAs with respect to workforce development and other advancements and improvements in infrastructure that may require regional planning and collaboration.

In addition to the Recovery Plan, the SPREDD CEDS will work in tandem with other existing plans such as PRIDCO's Integrated Economic Development Plan, as several of the largest private employers in the SPREDD region operate in facilities leased from PRIDCO, plus other adopted elements of the Puerto Rico Disaster Recovery Action Plan for the use of CDBG-DR Funds, the United Plan for Puerto Rico WIOA for 2020-2023, and others to work towards the following abridged goals:

- Promote sustainable economic growth
- Attract additional private capital
- Promote effective governance and transparency
- Build capacity
- Support ocean and visitor economy initiatives
- Incorporate economic resilience
- Decrease outmigration of the skilled workforce
- Incentivizing formal/additional labor force participation by means of developing a 21<sup>st</sup> Century workforce
- Broadening the tax base
- Rehabilitation and renewal of existing housing units
- Increasing fiscal discipline
- Clarify ownership and responsibility for various infrastructure assets



## SUMMARY BACKGROUND

It is unlikely that any regional economy represented by an existing or proposed EDD has ever endured the multiple economic hardships over a longer period of time than the six municipalities comprising SPREDD. Starting in 2006, a key federal tax incentive for manufacturing in U.S. territories (section 936 of the Internal Revenue Code of the United States) was completely phased out, which coincided with the start



Map 1: The SPREDD Region

of an enduring recession, where the GDP of Puerto Rico decreased from \$103.9 billion in 2006 to \$88.4 billion in 2019.<sup>1</sup> During this timeframe, Puerto Rico lost nearly 239,000 jobs, including 43,000 manufacturing jobs. In May 2017, the Commonwealth of Puerto Rico declared a form of bankruptcy by means of reorganizing under Title III of PROMESA, which was enacted because there was no provision for a U.S. territory to reorganize under the U.S. Bankruptcy Code.

Shortly after reorganizing under Title III, Puerto Rico was devastated by Hurricanes Irma and María in September 2017. Hurricane María was the most intense hurricane to make landfall in Puerto Rico since 1928.<sup>2</sup> Hurricane damage to the electrical grid, disruptions to telecommunications, and other infrastructure damage resulted in substantial business losses and negatively impacted Puerto Rico's ailing economy. As noted in Chart 1, the Government Development Bank for Puerto Rico Economic Activity Index (GDB-EAI), which is highly correlated with GDP levels and growth rates, dropped from 122.1 (1980 = 100) in August 2017 to 98.8 in November 2017. By the GDB-EAI metric, the economy of Puerto Rico was set-back almost 40 years because of Hurricanes Irma and Maria. In the last 40 years, based on the GDB-EAI, the economy of Puerto Rico has been stagnant, with a compound annual growth rate of only .36%.

<sup>1</sup> Source: World Bank Metric: Constant 2010 US\$

<sup>2</sup> Homeland Security Operational Analysis Center (HSOAC)

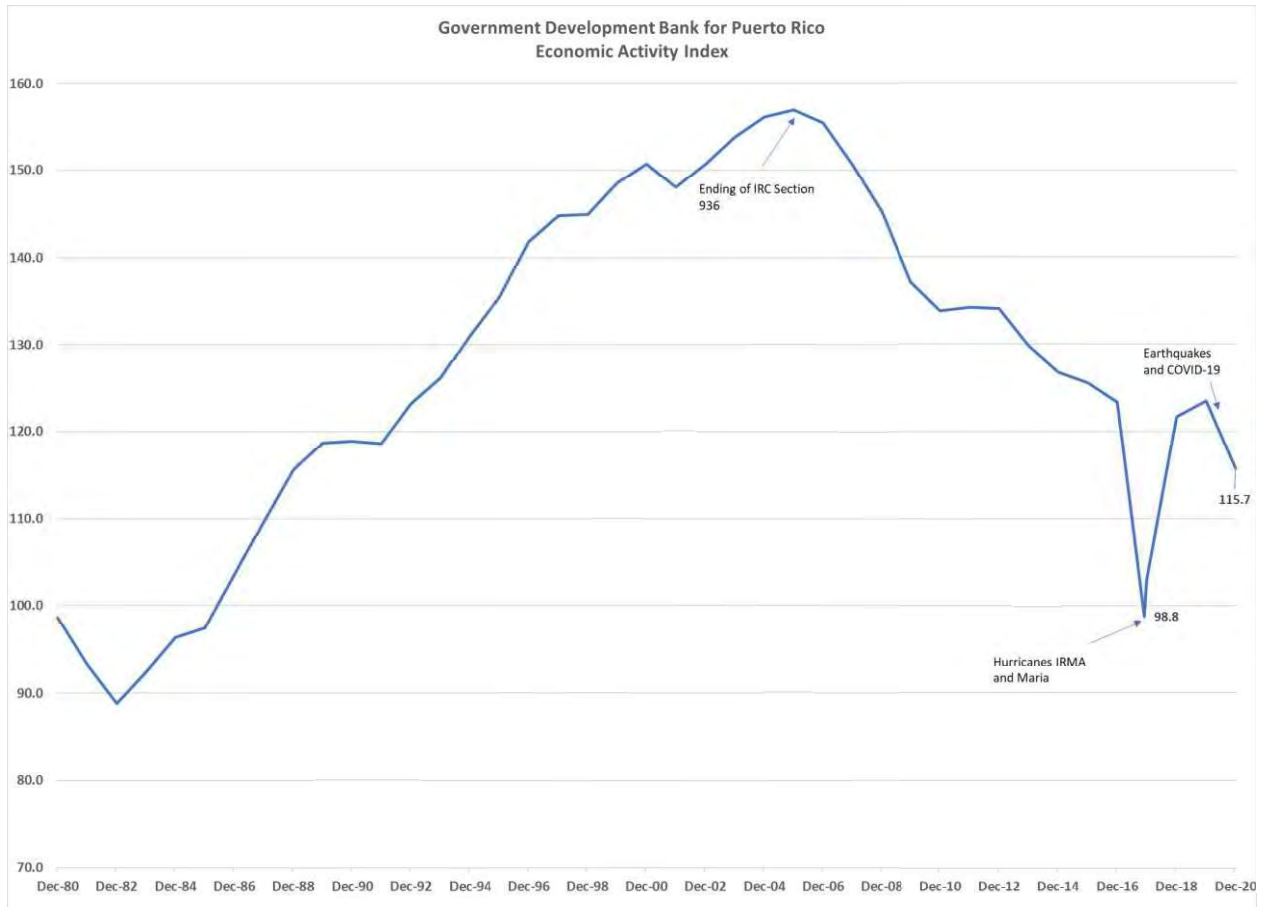


Chart 1: Government Development Bank of Puerto Rico Economic Activity Index.

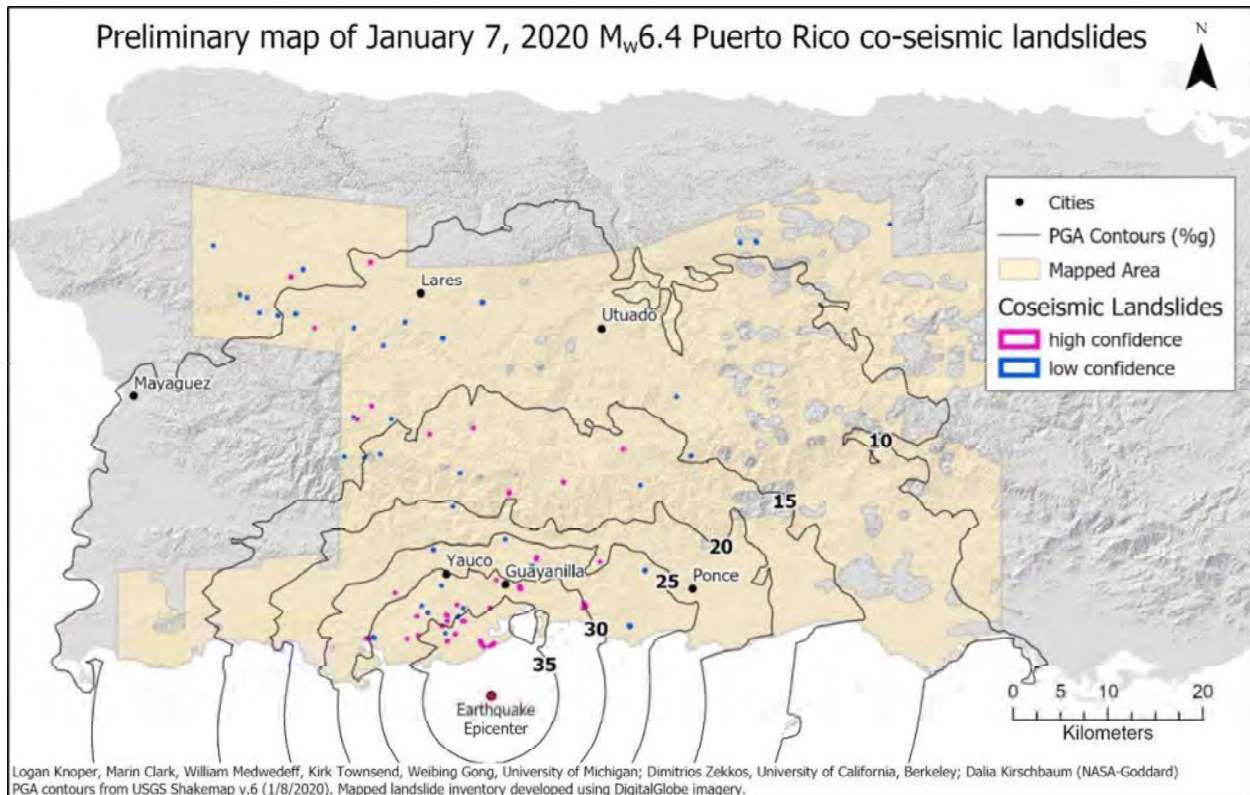
Recovery was complicated by political instability<sup>3</sup> and slow approval of hurricane recovery funds. As Puerto Rico was starting to make inroads to an economic recovery, by means of registering a 1.2% increase in GDP during 2019<sup>4</sup>, in early 2020, the SPREDD region, as well as other areas in southern Puerto Rico, were plagued by a series of earthquakes, with the strongest registering 6.4 on January 7, 2020. The epicenter of the later occurred in the offshore deformation zone bound by the Punta Montalva Fault on land and the Guayanilla Canyon offshore<sup>5</sup>. Although there is no official estimate of damages and losses as a result of the earthquake on the COR3 transparency portal, in March 2021 the AAFAP (Puerto Rico Fiscal Agency and Financial Advisory Authority) published a preliminary estimate of damages and losses of \$782 million. Also in March of 2021, Puerto Rico, like the rest of the world, began to experience the widespread impacts of COVID-19. With 21.3% of Puerto Rico’s population 65 years and older<sup>6</sup>, COVID-related lockdowns were stringent.

<sup>3</sup> Puerto Rico had three governors during the month of August 2019.

<sup>4</sup> World Bank

<sup>5</sup> USGS

<sup>6</sup> U.S. Census



Map 2: Preliminary map of the January 7, 2020 Mw 6.4 Puerto Rico co-seismic landslides. The impacted area shown in the map completely covers the SPREDD Region. Credit: Knoper, Clark, Medwedeff, Townsend, Gong (University of Michigan), Zekkos (University of California Berkeley, Kirschbaum (NASA GSFC)

As demonstrated in Chart 2, Puerto Rico’s current economic situation can also be attributed to a history of incentives that have come and gone at various intervals over the last 70 years when Puerto Rico, as well as the SPREDD region, began to transform from an agrarian society to an industrialized economy. The Revenue Act of 1921 provided a tax exemption to all U.S. corporations receiving income from U.S. possessions or territories; however, at the time, Puerto Rico’s local income taxes essentially nullified the federal tax incentives.

Puerto Rico started to make inroads as an industrialized territory during World War II. After seeing the benefits of moving to an industrialized society, Puerto Rico’s legislature passed the Industrial Incentives Act of 1948, also known as “Operation Bootstrap,” which exempted U.S. corporations from most Puerto Rican taxes, thus enabling U.S. corporations to take advantage of the Revenue Act of 1921. The U.S. supported this effort, viewing Puerto Rico as a vital capitalist outpost in the Caribbean.<sup>7</sup>

<sup>7</sup> Reuters

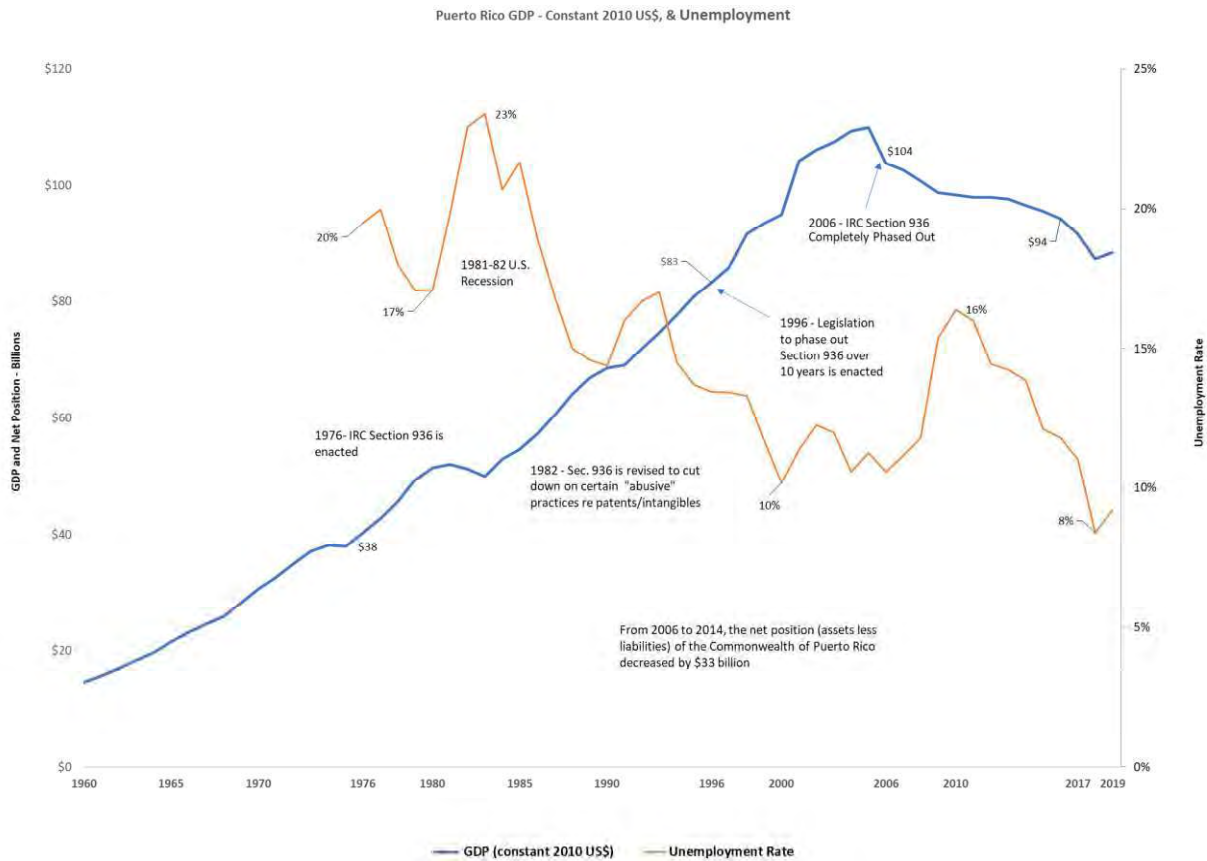


Chart 2: Puerto Rico GDP – constant 2010 US\$. Source: World Bank Unemployment Rate: U.S. Bureau of Labor Statistics

Operation Bootstrap successfully industrialized Puerto Rico and shifted the economy’s base from agriculture to industry in less than 20 years. However, the industrialization of Puerto Rico did little to expand the workforce, as many manufacturers were locked into global supply chains; therefore, there were limited multiplier impacts on other jobs and local business creation.<sup>8</sup> The Possession Tax Credit created in 1921 evolved into section 936 in 1976. In 1992, the Congressional Budget Office estimated section 936 would cost taxpayers \$15 billion for the five years covering the 1993-1997 fiscal years. Legislation phasing out Section 936 over the next decade was signed into law in 1996.

As demonstrated in Chart 2, the economy of Puerto Rico, as well as the SPREDD region, has expanded and contracted to a significant extent based on similar expansions and erosions of incentives. **Key components of plans for economic growth and resiliency, as well as this CEDS focus on growing industries able to flourish in the region absent of incentives.** For example, during the 30 years when Section 936 was in place in some capacity, the unemployment rate was never lower than 10%. Decreases in the unemployment rate during 2018 and 2019 are attributed to decreases in the labor force, as opposed to new job creation.

<sup>8</sup> Reuters, December 20, 2016: How dependence on corporate tax breaks corroded Puerto Rico’s economy.

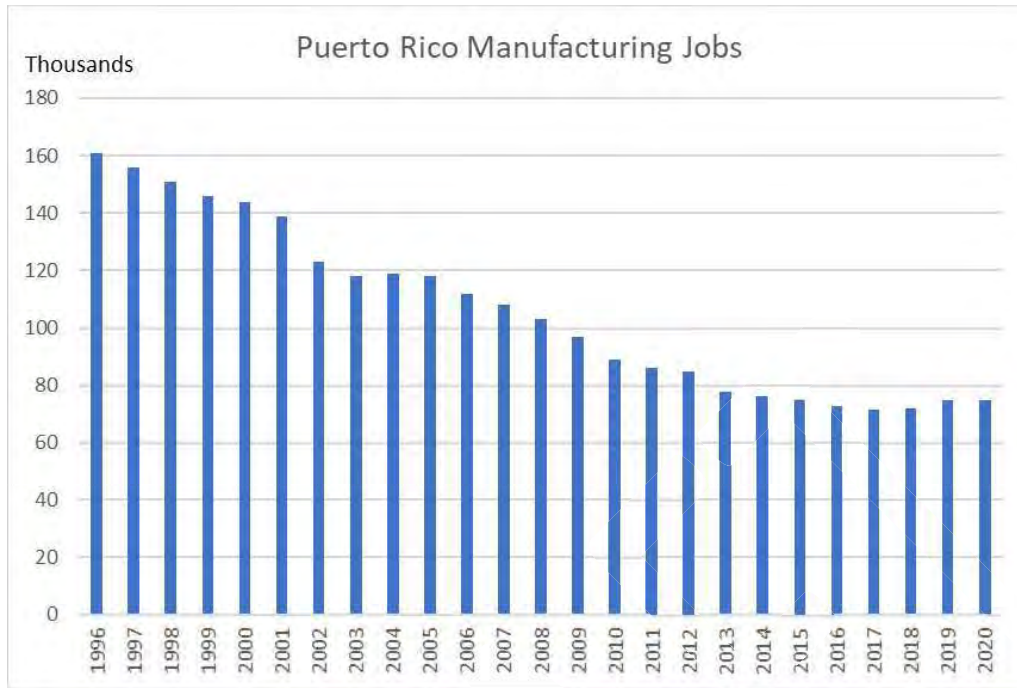


Chart 3: Manufacturing Jobs in Puerto Rico since legislation to end section 936 of the IRC was enacted in 1996. Source: U.S. Bureau of Labor Statistics

The prolonged recession, compounded by Hurricanes Irma and Maria, earthquakes, and COVID-19 has led to significant job losses for Puerto Rico and the SPREDD region. Since 2006, Puerto Rico has lost nearly 239,000 jobs, or 22% of its employment base.<sup>9</sup>

As shown in Chart 3, Puerto Rico has lost

86,000 manufacturing jobs since legislation to phase out section 936 was signed into law in 1996. (Because of BLS data restrictions that may identify information about specific firms, historical data on the manufacturing base of SPREDD’s region is not available.)

It is encouraging to note that manufacturing employment in Puerto Rico, as well as the region, has increased slightly since 2017. The increase in manufacturing jobs also coincides with the passage of the Tax Cuts and Jobs Act (TCJA) in late 2017, which among other things made it more difficult for U.S. companies to benefit from very low foreign income tax rates. Even though Puerto Rico is part of the U.S. economic system, it remains a foreign jurisdiction for U.S. income taxes, which some view as a competitive strength. Although many feared the impact TCJA would have on Puerto Rico, even referring to the legislation as “the Third Hurricane,” manufacturing jobs have increased since its passage and now exceed pre–Hurricane Maria levels.

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The rapid transition of the SPREDD region from its agricultural base was also cited as a cause for some of the region’s issues by stakeholders. One stakeholder commented *“It is the poorest area of the country. Large economic projects based on petrochemicals were developed in the 1960s. When these failed, the population of the area was greatly impoverished and there has not been a regional project that can replace it.”* The closure of this economic activity in the early 1980s represented the loss of approximately 2,700 jobs.

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<sup>9</sup> U.S. Bureau of Labor Statistics QCEW

A closer look at the Southern Region, illustrates how significant the loss of manufacturing jobs has been in the last decade. The departure of Roche Pharmaceutical in 2020, was one of the most disruptive events. This was a pharma operation dedicated to the production of glucose testing strips. The closing of its manufacturing activity after operating for almost 50 years in Ponce eliminated an estimated 200 jobs.

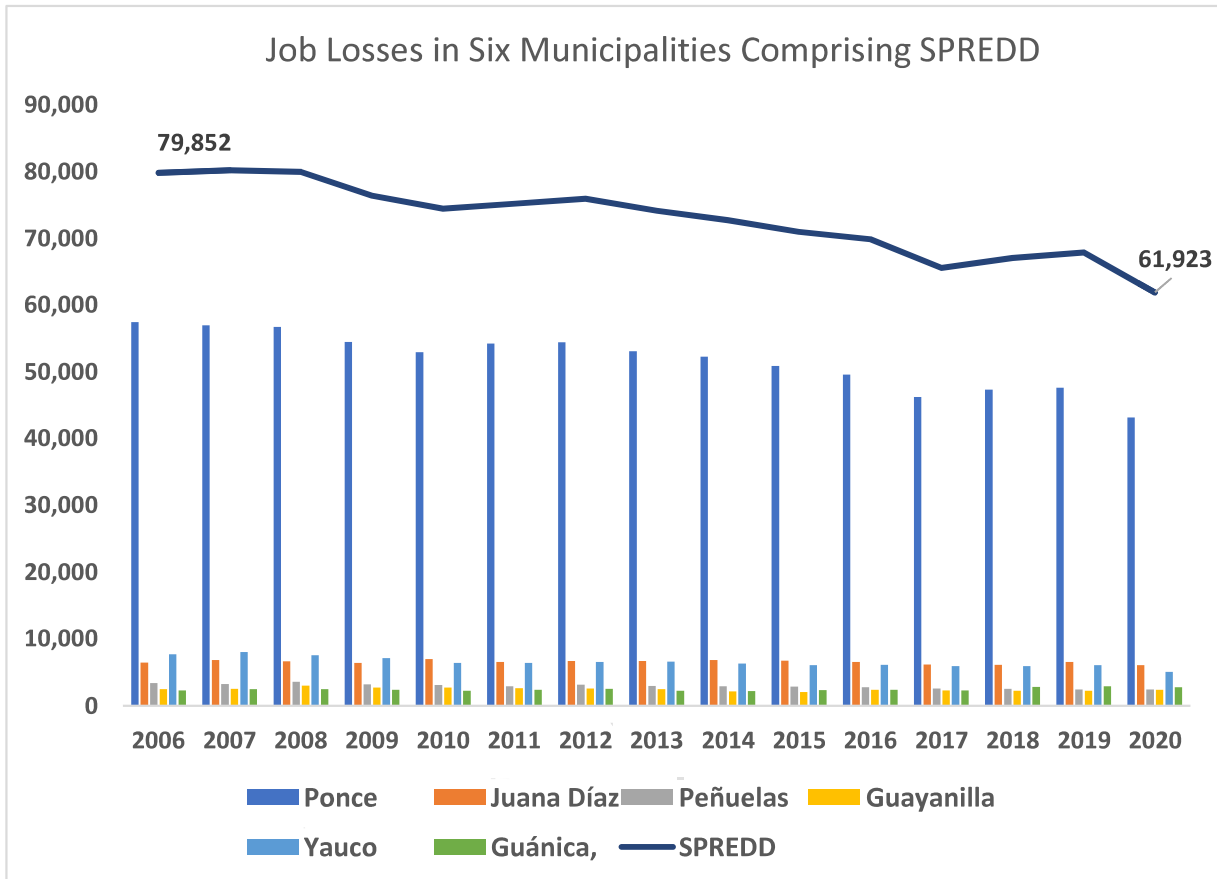


Chart 4: Job losses in SPREDD since the start of the recession. Source: U.S. Bureau of Labor Statistics

With respect to total jobs, the SPREDD region has fared similarly since 2006, losing nearly 18,000 jobs, or 22% of its employment base, as outlined in Chart 4. Puerto Rico and SPREDD have both lost nearly 9% of jobs from the end of 2019 to the Third Quarter of 2020; indicating the economic impacts of COVID-19 appear to be worse than the economic setbacks caused by Hurricanes Irma and Maria. (See Chart 5).

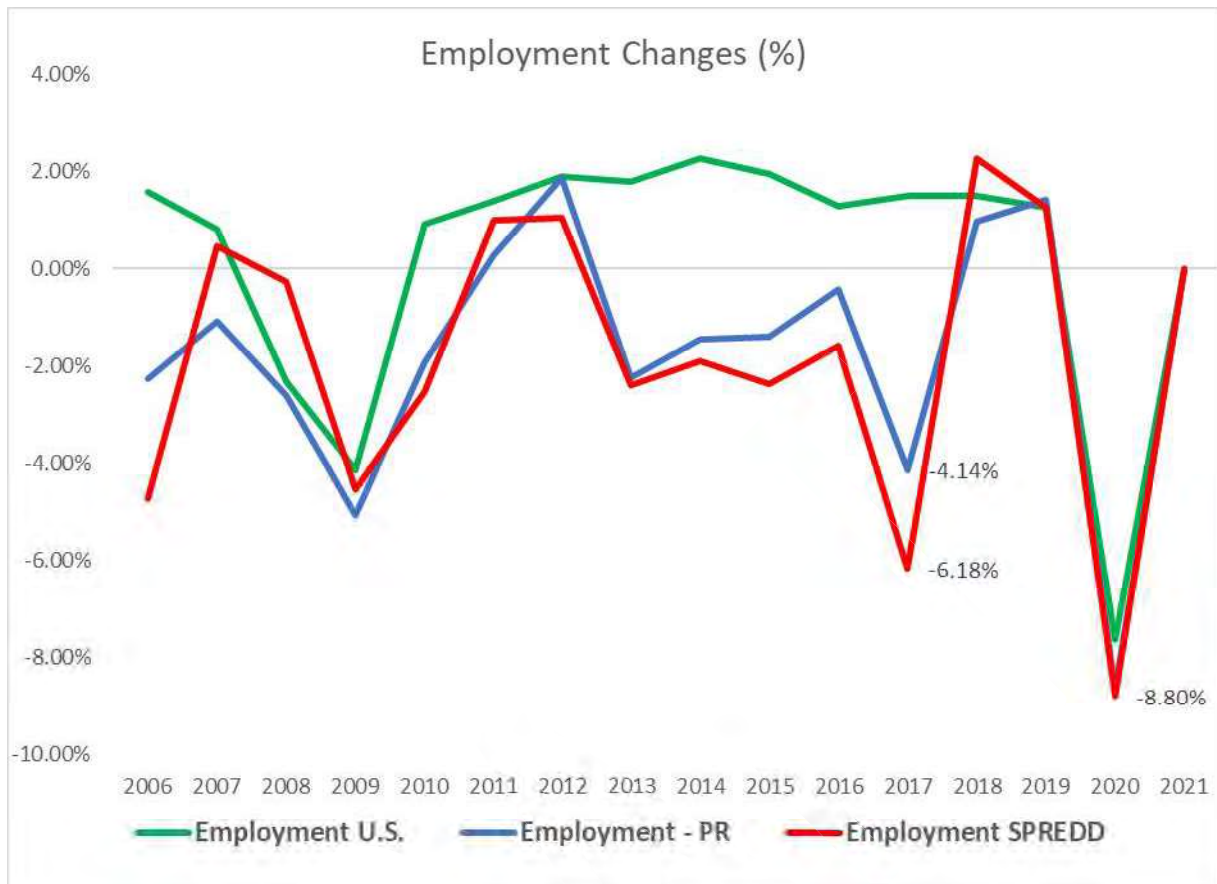


Chart 5: Changes in employment since start of recession in 2006. Source: U.S. Bureau of Labor Statistics

The current employment in the region by municipality is summarized in Table 2.

Municipality	Establishments	Employment	Quarterly Wages	Avg. Weekly Wage
Guánica	100	2,768	11,317,062	\$ 327
Guayanilla	121	2,400	12,779,581	426
Juana Díaz	308	6,078	40,847,946	538
Peñuelas	165	2,429	15,862,006	522
Ponce	2,144	43,192	256,682,466	475
Yauco	403	5,056	25,877,029	409
	<b>3,241</b>	<b>61,923</b>	<b>\$ 363,366,090</b>	<b>\$ 469</b>

Table 2: Establishments, Employees and Wages by Municipality. Source: U.S. Bureau of Labor Statistics QCEW Q3 2020

Population loss is a consequence of job loss. Pew Research has stated that employment opportunities are the primary driver of out-migration from Puerto Rico. Since 2006, SPREDD's region has realized a 23% decrease in population, which equates to nearly 79,000 residents.<sup>10</sup> In fact, SPREDD's region has realized population losses nearly every year since 2006, while Puerto Rico has seen a decrease in population of 16% during this timeframe.<sup>11</sup>

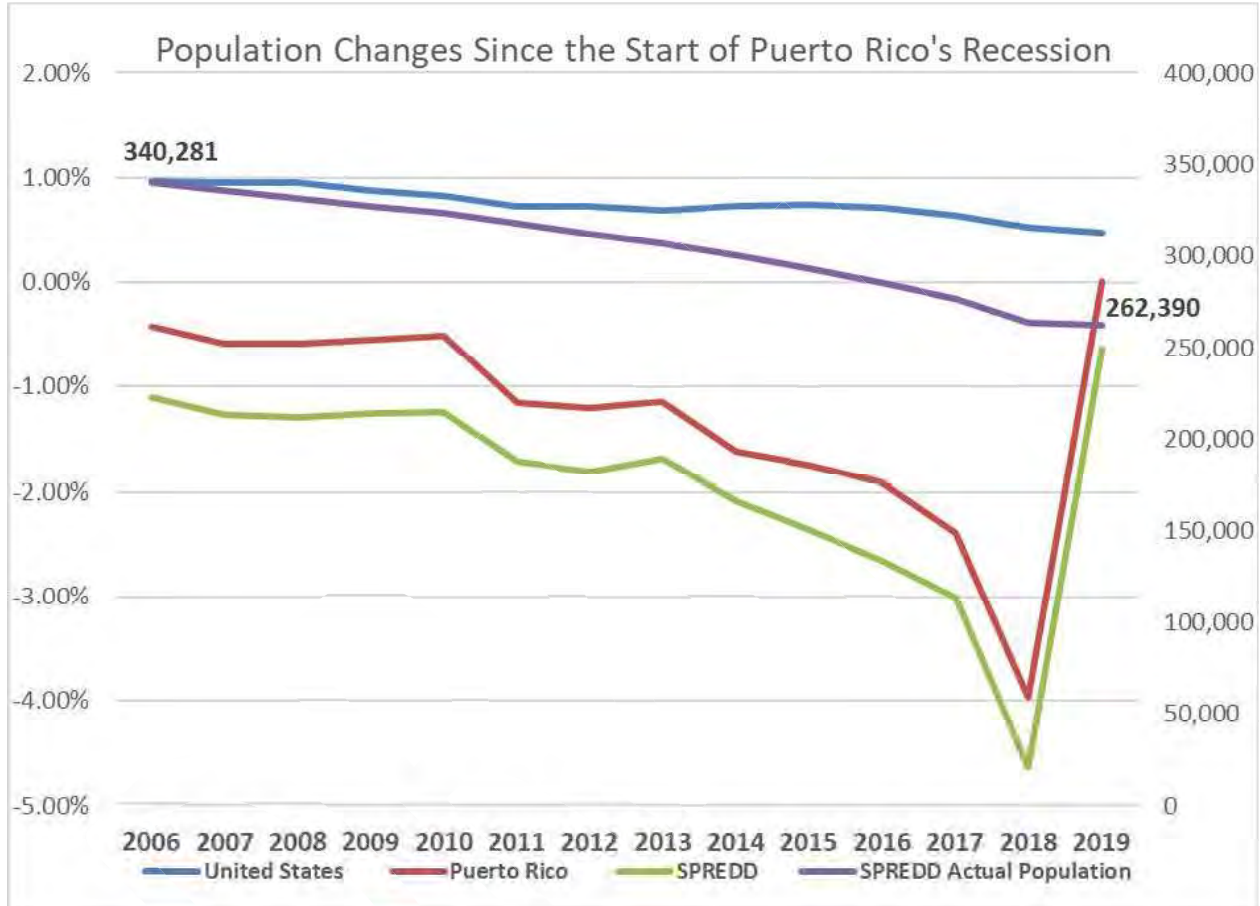


Chart 6: Population Changes Source: U.S. Census Intercensal Estimates

Poverty rates have also increased as a direct result of the enduring recession, job loss, and outmigration. According to the latest Census data, Puerto Rico is burdened with a poverty rate of 43.1%, which is 3.3x the national rate of 13.1, and more than twice as much as the poorest state (Mississippi). The six municipalities comprising SPREDD have a poverty rate of 52.6%.<sup>12</sup>

<sup>10</sup> U.S. Census Intercensal Estimates

<sup>11</sup> U.S. Census Intercensal Estimates

<sup>12</sup> U.S. Census Bureau ACS 5-year 2019. For additional details, see Table on Page 15.



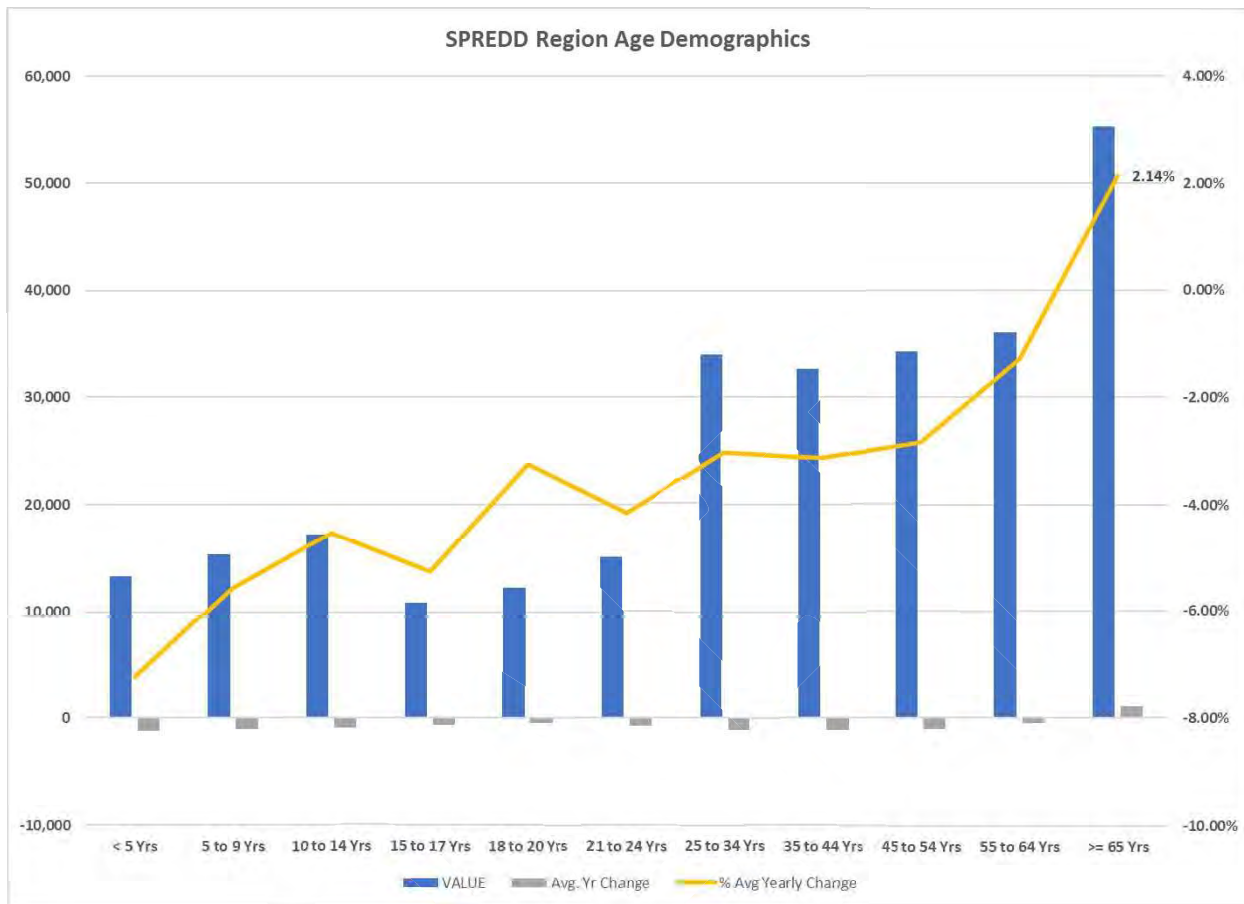


Chart 7: SPREDD Age Demographics Source: U.S. Census Bureau; 2019 American Community Survey 5 Year Estimates

According to many stakeholders, younger individuals will move to the U.S. for economic opportunities, and many return to Puerto Rico to retire or possibly care for ailing parents. Chart 7 indicates this pattern occurs in the SPREDD region, as the only age group increasing are those 65 years and over. The highest levels of out-migration are among those 25 to 44 years of age. This pattern of out-migration by the young (for economic opportunities) and returning to the Island to retire are contributing factors to Puerto Rico’s low Labor Force Participation Rate, which is currently<sup>13</sup> 40.3% according to the Economic Development Bank for Puerto Rico. By contrast, the U.S.

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*“Outmigration is the primary reason for the declining labor force participation and a key explainer of why labor force participation is so low among less-educated workers. From the perspective of the overall labor force of Puerto Rico, the takeaway is that Puerto Rico is losing working-age individuals who typically drive the economy.”* RAND Corporation - Supporting a 21<sup>st</sup> Century Workforce in Puerto Rico

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<sup>13</sup> February 2021

Labor Force Participation Rate is currently 61.5%.<sup>14</sup>

LFPRs by municipalities in Puerto Rico are not calculated; however, using labor force numbers from the Puerto Rico Department of Labor and Human Resources for the six municipalities and the population 18 and over (Chart 8), the estimated LFPR for SPREDD is 36.9%.

With respect to housing units in the SPREDD region, according to the U.S. Census, there are 128,362 units.<sup>15</sup>

Various news accounts and stakeholder interactions indicate that over 8,000 housing units were damaged as a result of the earthquakes. A conventional indicator of U.S. housing affordability is the percentage of income spent on housing. Housing expenditures that exceed 30% of household income have historically been viewed as an indicator of a housing affordability problem, according to the University of Pennsylvania’s Wharton Real Estate Center. The 30% of household income metric is also cited by the U.S. Census Bureau as a key affordability metric.

Based on the 30% of household income metric, there appears to be adequate affordable rental units in all six municipalities.

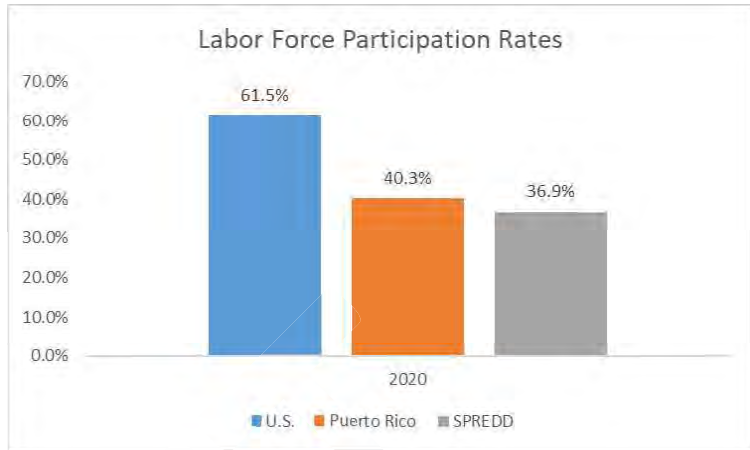


Chart 8: Labor Force Participation Rates 2020 Sources: BLS, Economic Development Bank for Puerto Rico, Puerto Rico Department of Labor and Human Resources and U.S. Census Bureau

	Median Unit Value	Median Household Income	Median Monthly Cost Mortgage	% of Median Household Income	Median Monthly Rent	% of Median Household Income
<b>Guánica</b>	\$88,100	\$12,995	\$664	61%	\$305	28%
<b>Guayanilla</b>	\$79,700	\$17,379	\$698	48%	\$259	18%
<b>Juana Díaz</b>	\$91,600	\$20,657	\$764	44%	\$379	22%
<b>Peñuelas</b>	\$75,700	\$16,718	\$654	47%	\$311	22%
<b>Ponce</b>	\$97,400	\$17,069	\$774	54%	\$295	21%
<b>Yauco</b>	\$91,100	\$14,743	\$708	58%	\$276	22%

Table 3: Housing data; Source: U.S. Census Bureau; 2019 American Community Survey 5 Year Estimates

<sup>14</sup> BLS February 2021

<sup>15</sup> 2019 U.S. Census Bureau; 2019 American Community Survey 5 Year Estimates

At present,<sup>16</sup> the economy and employment base of the SPREDD region is represented in Table 4. Manufacturing has the highest wage base, followed by Public Administration.

	Establishments	Employment		Quarterly Wages	Avg. Weekly Wage
NAICS 31-33 Manufacturing	157	7,681	12%	\$ 58,171,755	\$ 616
NAICS 92 Public administration	104	9,652	16%	54,970,853	456
NAICS 61 Educational services	47	7,695	12%	53,532,905	557
NAICS 62 Health care and social assistance	681	6,965	11%	47,940,777	551
NAICS 44-45 Retail trade	638	9,794	16%	44,392,686	363
NAICS 72 Accommodation and food services	315	4,945	8%	13,896,213	224
NAICS 22 Utilities	14	1,139	2%	13,149,945	924
NAICS 56 Administrative and waste services	112	3,623	6%	12,948,607	287
NAICS 48-49 Transportation and warehousing	78	1,069	2%	9,283,054	695
NAICS 23 Construction	141	1,885	3%	9,217,031	391
NAICS 54 Professional and technical services	234	1,291	2%	8,771,225	542
NAICS 53 Real estate and rental and leasing	105	1,304	2%	7,858,244	483
NAICS 52 Finance and insurance	100	898	1%	7,105,270	632
NAICS 42 Wholesale trade	90	866	1%	6,152,882	570
NAICS 51 Information	29	530	1%	5,289,812	798
NAICS 81 Other services, except public administration	241	803	1%	3,400,503	339
NAICS 55 Management of companies and enterprises	7	386	1%	2,917,863	605
NAICS 11 Agriculture, forestry, fishing and hunting	124	1,075	2%	2,877,814	214
NAICS 71 Arts, entertainment, and recreation	17	185	0%	754,743	331
NAICS 21 Mining, quarrying, and oil and gas extraction	7	137	0%	733,908	429
	<b>3,241</b>	<b>61,923</b>		<b>\$ 363,366,090</b>	<b>\$ 469</b>

Table 4: Summary of establishments with employees, employment, and wages in the six municipalities represented by SPREDD. Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages Q3 2020.

The highest percentages of the workforce are employed in Public Administration and Retail. Manufacturing also continues to be a significant component of the workforce, comprising 12% of the workforce, and providing the most significant wage base. The largest employers in the region are outlined in Table 5. The data is the latest available from the Puerto Rico Department of Labor made available to SPREDD, which is as of Q3 2019.

Legal/Corporate Name	Municipality	Employees	
DEPARTAMENTO DE EDUCACION	PONCE	2,420	Based on the Q3 2019 data, the largest private employer in the SPREDD region is CooperVision, manufacturer of contact lenses at its facility in Juana Díaz. According to CooperVision's latest annual report, its facility in Juana Díaz is 527,285 square feet and represents its second-largest global facility. In addition to manufacturing,
MUNICIPIO DE PONCE	PONCE	2,226	
DEPT CORRECCION Y REHABILITACION	PONCE	1,709	
COOPERVISION CARIBBEAN CORP	JUANA DIAZ	1,595	
POINT BLANK PROTECTIVE APPAREL UNIF	GUANICA	1,121	
SAINT LUKES MEMORIAL HOSPITAL INC	PONCE	1,085	
U.S.S.C. PUERTO RICO INC	PONCE	1,029	
PONTIFICIA UNIVERSIDAD CATOLICA PR	PONCE	952	
POLICIA PUERTO RICO	PONCE	832	
HOSPITAL DAMAS INC	PONCE	787	

Table 5: Largest Employers in SPREDD Region. Source: Puerto Rico Department of Labor Q3 2019

<sup>16</sup> The data is as of September 30, 2020, which is the latest available from BLS.

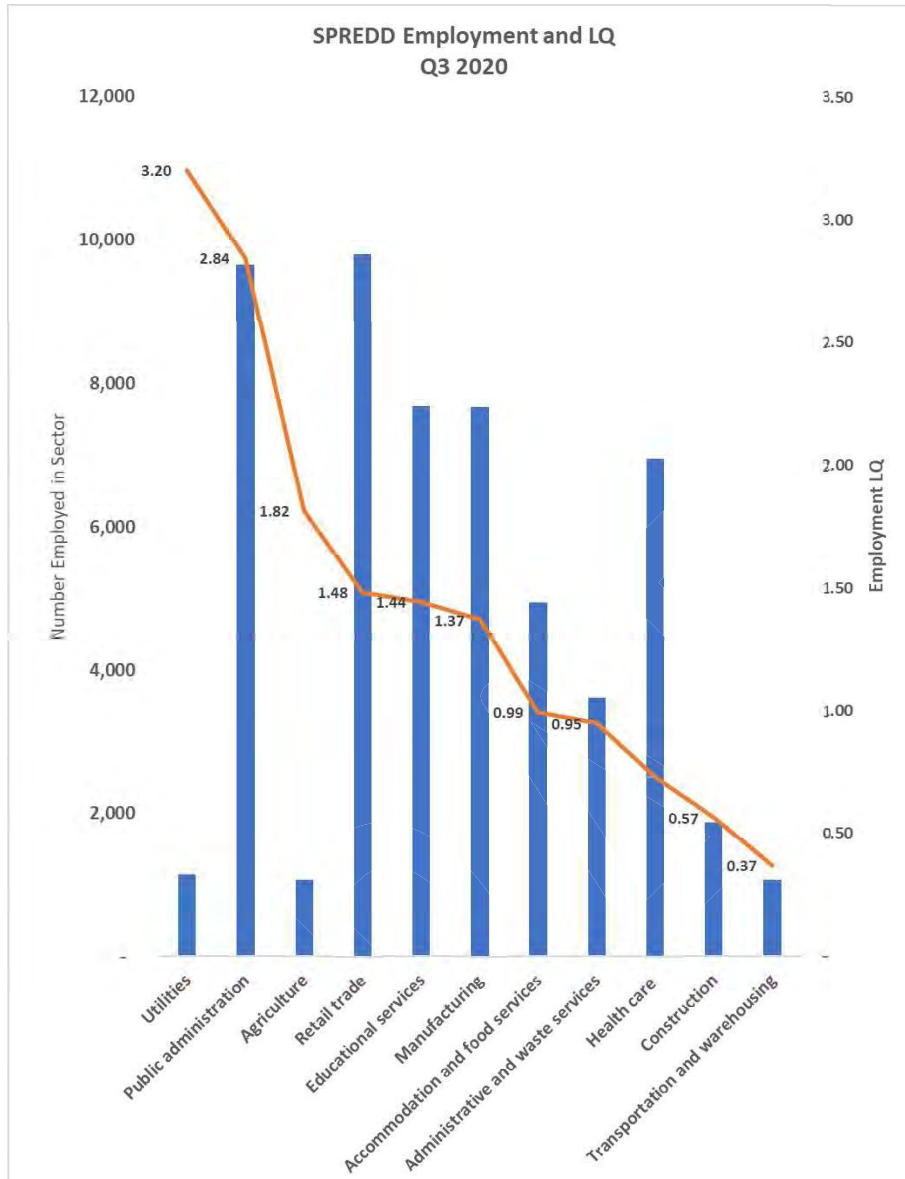


Chart 9: SPREDD Employment and LQ; Q3 2020 Source: U.S. Bureau of Labor Statistics QCEW

CooperVision also performs research, development and distribution at its Juana Díaz facility.

The second-largest private employer in the region is Point Blank Protective Apparel (PBPA), which produces military uniforms at its facilities in Guánica. The LQ (establishments) for Guánica for NAICS 315210, Cut and Sew Apparel Contractors is 36.58. The Berry Amendment (USC, Title 10, Section 2533a), restricts the Department of Defense (DoD) from using funds appropriated or otherwise available to DoD for procurement of food, clothing, fabrics, fibers, yarns, other made-up textiles, and hand or measuring tools that are not grown, reprocessed, reused, or produced in the United States. Items produced or assembled in Puerto Rico are Berry Amendment compliant.

Another significant employer noted in Table is U.S.S.C. Puerto Rico, Inc., which is part of Medtronic (NYSE:MDT), which develops, manufacturers and markets medical devices.

Chart 9 presents the sectors by means of their employment and associated Location Quotient (LQ). The LQ represents a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. Typically, an LQ > 1.0 indicates a particular product or service is exported, whereas an LQ close to 1.0 means is it sufficient, and an LQ < 1.00 may indicate a particular industry’s goods or services are imported.

The highest LQ noted was 3.2 for the Utility sector, as the primary electricity-generating assets for all of Puerto Rico are located in SPREDD’s region. The second highest LQ was Public Administration. Because government services are not likely “exported” from the region, as may be the case with a capital city, this

may be a sign of excess employment in this sector. Comparable data on municipal employment on a per-resident basis also indicates over-employment in the sector. For example, the Autonomous Municipality of Ponce is the second-largest employer in the region, with 2,226 employees, or one employee for every 59 residents. According to CityStats, for cities with more than 60,000 residents, there is typically one employee for every 112 residents. Stakeholders have noted over-regulation and a burdensome permitting process are hinderances to economic development.<sup>17</sup>

The six municipalities comprising the SPREDD region have withstood an enduring recession, multiple natural disasters, outmigration of talent, a pandemic, high unemployment, high poverty, and are further burdened with an inability to enter the capital markets because of the on-going Title III reorganization under PROMESA. Despite these extreme challenges, the region has underutilized assets that can be keys to building an enduring economy. There is significant need for the enhanced cooperation and capacity building made possible by an EDD.

The Health and Social Services sector has considerable establishments and employees; however, it does not register as a “traded” sector, meaning the LQ > 1.

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<sup>17</sup> One of the most recurring themes from stakeholder interviews and surveys was the “excessive” bureaucracy and “broken” permitting process. This does not reflect the opinion of the authors of this CEDS, but the comments received from stakeholders.

## SWOT ANALYSIS

The CEDS process requires a strategic investigation of a region's capabilities and capacity. Starting in February 2020, supporters of SPREDD began to engage with community leaders and other stakeholders to develop regional cooperation for economic development in southwestern Puerto Rico. Existing cooperation agreements among sixteen municipalities in southern Puerto Rico were analyzed, and the six were recommended, as Ponce, Peñuelas, Guayanilla, Juana Díaz and Yauco. Guánica was added to cover all of the southwestern coastal municipalities, and because it was the epicenter of the 2020 earthquakes.

The EDD formation process commenced soon after parts of the region were significantly impacted by a series of strong earthquakes. Initial engagements were held with stakeholders representing: Manufacturing, Entrepreneurship, Agriculture, Small Business, Universities, Vocational Institutions, Tourism, Government, Resiliency Organizations, and Economic Development Organizations.

On January 29, 2021, the University of Puerto Rico – Ponce facilitated a virtual SWOT analysis event, attended by over 50 stakeholders in the region. The event provided a broad opportunity for regional leaders to provide input and direction on the state of the economy in the SPREDD region. The resulting analysis identified several key areas to leverage opportunities into clear strategic objectives and activities, and these are mentioned in the strategic direction/action plan section.

As a pilot EDD, this CEDS document is an initial locally-based economic development strategy. It has been developed to access key stakeholders to engage and coordinate with existing economic development initiatives. Those engaged include a geographically diverse group of community leaders from higher education, public service, and private industry.

As a result of these initial and subsequent stakeholder engagements, the following Strengths, Weaknesses, Opportunities, and Threats were identified:

### Strengths

**The SPREDD region, and all of Puerto Rico, enjoys all of the advantages provided by U.S. rule of law; however, it is still considered to be a foreign jurisdiction for income tax purposes.** In general, this means foreign subsidiaries of U.S. companies operating in Puerto Rico will generally have their earnings taxed in the U.S. at the reduced rate of 10.5%, as opposed to the standard U.S. tax rate of 21%.

After Section 936 was completely phased out in 2006, many U.S. based pharmaceutical and medical device companies choosing to maintain operations in Puerto Rico converted their Puerto Rico subsidiaries to Controlled Foreign Corporations (CFCs).<sup>18</sup> CFC's were a key target of the TCJA in late 2017; however, the effective tax rates of many CFCs conducting substantially all of their foreign operations in Puerto Rico, such as Amgen, were actually lowered as a result of TCJA from 15.7% in 2016 to 12.1% in 2018.<sup>19</sup> Manufacturing jobs in Puerto Rico subsequently increased.

**There are vast amounts of fertile land in the region.** The SPREDD region represents the epicenter of Puerto Rico's agriculture sector. Agriculture is an industry that can thrive in Puerto Rico absent

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<sup>18</sup> A controlled foreign corporation is any foreign corporation in which more than 50% of the total combined voting power of all classes of stock entitled to vote is owned directly, indirectly, or constructively by U.S. shareholders.

<sup>19</sup> Amgen 2018 Annual Report

of incentives; however, there are notable challenges in realizing this strength, primarily unskilled labor, as noted in Weaknesses. And for example, despite recent excellent efforts to consolidate and grow the coffee industry in the municipality of Yauco, much remains to be done for this and other large agricultural industries in the rest of the municipalities of the SPREDD Region.

**Infrastructure is in place to further development and connectivity to the global economy.** However, stakeholders note that these assets are extremely underutilized, especially Mercedita International Airport in Ponce. According to stakeholders, ports in the region are also thought to be underutilized; however, alternative strategies may need to be developed for enhanced utilization due to regulations and market timing, as discussed in Opportunities. Portions of the transportation infrastructure are also within Foreign Trade Zone # 163.

**Potential for development of the “Blue” or “Ocean” Economy.** The World Bank defines Blue Economy as “the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of the ocean ecosystem.” Ocean economy initiatives have been identified as a key area where the region can thrive without incentives, which may not always be present. Some of Puerto Rico’s economic issues are rooted in the elimination of certain incentives that had been in place for many years.

**More than 30,000 students are enrolled in six universities in the SPREDD region.** Stakeholders claim that we need to turn these individuals into “developed resources” as opposed to “exporting” them.

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*“Puerto Rico is historically known for graduating exceptional tech and engineering talent. However, top candidates consistently find attractive job opportunities abroad and not locally. Few entrepreneurs remain on the island, where they confront limited resources, lack of incentives and scant financial support.*

*We want to create an environment that provides knowledge, access and capital to help leaders start local tech businesses that can thrive and improve economic conditions for their families, communities and the people of Puerto Rico.”*

*Orlando Bravo  
Managing Partner - Thoma Bravo*

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**The region has beaches, fertile lands and other elements necessary for agricultural and agro-tourism development.** These natural and cultural assets may also be leveraged for film production; however, the current industry model appears to be driven by incentives.

**The region has tremendous healthcare and healthcare-education assets.** Although healthcare is a prominent industry in the region, it does not register as a traded sector (LQ > 1.0). Based on stakeholder interviews and analysis of the assets, the healthcare sector; especially in Ponce, has key assets that can bring additional prosperity to the region. Key hospitals in the region are listed in Table 6.

Legal/Corporate Name	Municipality	Beds	Est Employees Q3 19
HOSPITAL SAN LUCAS	PONCE	427	1,085
HOSPITAL DAMAS INC	PONCE	331	787
HOSPITAL METROPOLITANO DR. PILA	PONCE	212	401
HOSPITAL SAN CRISTOBAL	PONCE	157	377
HOSPITAL PAVIA YAUCO	YAUCO	112	268
VETERANS ADMINISTRATION	PONCE		152

Table 6: Key hospital in the region.

Med Centro Healthcare System is another example of a southern health institution that is expanding. Their clinical services and special programs are impacting several southern municipalities, including Ponce, Peñuelas, and Juana Díaz. As of 2020 the institution serves more than 55,000 people.

Another notable regional healthcare asset is Ponce Health Sciences University (PHSU). PHSU has recently announced a \$172 million expansion plan for its campus in Ponce. Upon completion, PHSU will almost double the size of the institution and considerably expand its economic and social development footprint in the region. Also prominent in the region is the Ponce Research Institute (PRI). In 2020, PRI conducted over 300 clinical trials with more than 200 patients participating in those trials. It also employed over 45 full-time staff and 100 students from the PHSU to aid in their research efforts.

**Even though driven by U.S. tax incentives, there is a substantial presence of ophthalmic goods manufacturing in the region.** CooperVision, which is one of the top five companies engaged in designing and manufacturing contact lenses, has its second-largest global production facility in Juana Díaz. The LQ (establishments) for the NAICS Code 339115-Ophthalmic Goods Manufacturing for Juana Díaz is 53.07. According to company documents, the Juana Díaz facility is leased from the Puerto Rico Industrial Development Company (PRIDCO).

## Weaknesses

The weaknesses of the SPREDD region are significant and represent decades of unfortunate events and circumstances. There is no special project or event that will resolve all of these weaknesses in the near-term; however, the formation of SPREDD and the enhanced collaboration noted is a significant step in the right direction and aligns with many plans formulated to address singular and multiple weaknesses noted.

**The largest existing weakness is the poor economy within the region and throughout Puerto Rico.** Since 2006, Puerto Rico has lost nearly 239,000 jobs, or 22% of its employment base.<sup>20</sup> Many stakeholders have cited the resulting “flight of talent” as a key weakness.

**Not having an Economic Development District (EDD) for the region.** Despite the current and past efforts to have an organization that represents the interests of the Southern Region, not having an EDD designation means not having achieved the regional economic development planning process required to be recognized at the federal level with EDA.

<sup>20</sup> U.S. Bureau of Labor Statistics QCEW



**The region, and all of Puerto Rico, is burdened by expensive and unreliable power.** A basic component for a competitive economy is an inexpensive, reliable, and abundant source(s) of electricity. By contrast, Puerto Rico’s power is limited, expensive and unreliable. Based on the latest information from the U.S. Energy Information Administration (EIA), Puerto Rico pays 2.64x per kWh than the U.S. average for industrial power. The current rates in Table 7 are also a function of low energy prices due to lower demand as a result of COVID-19. Residential rates per kWh in recent years have been near 30 cents/kWh. A stated “goal” for Puerto Rico’s energy policy is to create a price of electricity of 20 cents/kWh. This metric alone may eliminate the SPREDD region for consideration by site selectors.

Prices			
Electricity	Puerto Rico	United States	Period
Residential	17.37 cents/kWh	12.69 cents/kWh	Jan-21
Commercial	19.27 cents/kWh	10.31 cents/kWh	Jan-21
Industrial	16.78 cents/kWh	6.35 cents/kWh	Jan-21

*Table 7: Latest electricity prices for Puerto Rico. Source: U.S. Energy Information Administration*

The deterioration of the energy generation and distribution system from lack of investment and the resulting unreliability and lack of resilience have also been cited by stakeholders as a weakness for the region (and Puerto Rico). With respect to quantifying reliability, according to the 2020 report from PREPA, customers experienced an average of one hour per month without power, or 12 hours annually, which is 3x the average time without power for the U.S., according to EIA.

Hawaii, like Puerto Rico, is also burdened by high electricity costs, as there are no oil or natural gas reserves and fuel (for non-renewable sources) must be imported. In order to overcome this weakness, the entire energy generating and distribution system may have to be redesigned, according to stakeholder feedback.

**The region, as well as all of Puerto Rico has a large underground economy.** When the Recovery Plan was being compiled, the underground economy was estimated to be approximately 25% of the total economy by economists from RAND Corporation. The development of an underground economy is often the result when there is widespread poverty, excessive regulations (permitting process) and a regressive (10.5% sales tax) tax structure. Stakeholders have commented that opportunities must be presented that overshadow the underground economy.

**Within the SPREDD region, as well as throughout Puerto Rico, the high levels of poverty often result in people building their own homes, which are not compliant with the codes needed for these structures to withstand hurricanes and earthquakes.** Enforcement of this is a challenge for local officials, as shelter is a basic human need; however, these structures will continue to be vulnerable to future disasters and will negate many of the current resiliency initiatives.

**The region is burdened by a poverty rate of 52.6%.<sup>21</sup>**

<sup>21</sup> U.S. Census Bureau ACS 5-year 2019

High poverty signals a lack of resources, which in turn may make implementing some of the initiatives more challenging. The lack of resources has also resulted in a call for a partnering and a higher collective capacity, which are key reasons for the formation of SPREDD.

	Poverty Rate
Guánica	63.4%
Guayanilla	54.8%
Juana Díaz	46.7%
Peñuelas	57.4%
Ponce	53.2%
Yauco	49.0%
	<b>52.6%</b>

*Table 8: Poverty rates in the municipalities that comprise SPREDD. Source: U.S. Census Bureau ACS 5-year 2019*

**The ongoing reorganization under Title III of PROMESA severely limits access to the capital markets for certain initiatives.** Puerto Rico’s new governor, Pedro Pierluisi, has made getting Puerto Rico out of Title III bankruptcy “as quickly as possible” a priority. Additionally, Puerto Rico has recently been able to advance initiatives under the public-private partnership model, as evidenced by the recent agreement between LUMA Energy and Puerto Rico’s Public-Private Partnerships (P3) Authority and the Puerto Rico Electric Power Authority (PREPA) for the operation of the transmission and distribution of the electrical grid.

**Outmigration of skilled labor and a low labor force participation rate.** (See Pages 15 - 16)

**Some stakeholders fear that the strength of the unions in San Juan will be an obstacle to full development and realization of the Port of Ponce/Port of the Americas.**

**The decommissioning of old industrial facilities on the site where the former Commonwealth Oil Refining Company (CORCO) once operated are still ongoing, making it a long-lasting process to finish the cleanup and rehabilitate the site for the establishment of new industries.**

**There is limited capital available for small business expansion and entrepreneurial startups.** This weakness has been noted in many economic plans and by numerous stakeholders during the CEDS process.

**Over-regulation, excessive bureaucracy, an “unbearable” permitting process, and lack of government support were cited as issues from many stakeholders.** This is also consistent with Puerto Rico scoring poorly in permitting in the World Bank’s Ease of Doing Business Rankings. (It should be noted that in the World Bank’s rankings, Puerto Rico is evaluated as a single country, whereas all 50 states are collectively evaluated as the U.S.) Ease of doing business is also a recurring theme in the Recovery Plan as well. In 2018 steps were taken to allow for “at will” employment in Puerto Rico by means of reversing Law 80; however, legislative efforts to change this failed.

The cumbersome permitting process may also be a function of the excess government, as indicated by the high LQ for Public Administration. (See Chart 9 on Page 19.) For example, the Municipality of Ponce is the second-largest employer in the region, with 2,226 employees<sup>22</sup>, or one employee for every 59 residents. According to CityStats, for cities with more than 60,000 residents, there is typically one employee for every 112 residents, indicating that the largest municipality (by population) in the region has nearly 2x the number of municipal employees.

<sup>22</sup> Puerto Rico Department of Labor Q3 2019

Despite the high number of employees in the Public Administration sector, stakeholders have also complained about the “lack of participatory processes where government can get feedback and guidance from industry experts.” A lack of support from Puerto Rico tourism officials was also noted by stakeholders.

**Poor communication infrastructure in rural areas of the region** was cited by several stakeholders; however, independent information on internet speeds in the region was not present on the National Broadband Availability Map. FCC maps of broadband availability are often not reliable, based on the reporting requirements. By FCC reporting standards, if one square foot of a census tract is covered by broadband, then the entire tract is “deemed” to be covered.

**Most SPREDD municipalities lack local professionals dedicated to economic development.** As a result, the SPREDD region may not be on the radar of site selectors, and existing companies may not receive needed support, according to stakeholders.

**The Jones Act limits opportunities for development at the Port of the Americas/Ponce, as well as other ports in the SPREDD region.** Numerous studies have indicated the Jones Act hurts Puerto Rico, while numerous studies supported by proponents of the Jones Act disagree.

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*The Jones Act is particularly costly to Puerto Rico because it keeps the island from capitalizing on its comparative advantage as a transit point for cargo. Colin Grabow, who heads the Cato Institute’s Project on Jones Act Reform, puts it this way: “Absent the Jones Act we would see large ships drop their cargo in San Juan or Ponce for placement on smaller ships to various ports in the region, including the U.S.— basically a hub-and-spoke model. But no one will ever use Puerto Rico as such a transshipment hub so long as shipping between PR and the world’s largest economy is subject to the Jones Act.”*

Wall Street Journal April 4, 2021  
Alaska Tourism Is Ailing but not from COVID

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**Mercedita International Airport in Ponce offers limited connectivity.**

Currently, the airport is served only by JetBlue. Over 10 years ago, it was served by other airlines like Spirit, Continental, Cape Air and Delta Connection. In recent decades there has been widespread support from the mayors and economic sectors of the region, led by the Chamber of Commerce of Southern Puerto Rico, for the reactivation of the airport as one step that meets the needs of the Southern Region.

**Some coral reefs in the SPREDD municipalities coastline are in poor health.** This weakness could also be a means to advance the Ocean Economy, as key stakeholders in the region are communicating with officials in Hawaii regarding methods to revitalize coral reefs.

It is worth noting that an opportunity may exist to align initiatives to the NCR 15 - Protection and Restoration of Coral Reefs and Seagrasses Course of Action of the Puerto Rico Recovery Plan. In addition, as part of the present recovery process, the PR Government is considering a project for the Tallaboa Reefs, which includes restoring approximately 125,000 m<sup>2</sup> of coral reefs in Guayanilla to reduce the frequency and severity of flooding and coastal erosion.

**Stakeholders in the agricultural industry claim that many prospective workers prefer to receive government assistance, as opposed to the hard work and low pay associated with agriculture, which limits the potential of certain agricultural initiatives.**

## Opportunities

**In April 2020, US Department of Transportation expanded air transfer rights for cargo and passengers to the international airport Ponce (as well as San Juan and Aguadilla).** With this decision, Puerto Rico becomes the first U.S. territory in the Caribbean to become a hub for foreign air carriers. However, this waiver expires in 2022, unless progress can be demonstrated to developing Puerto Rico (Ponce) as an air transfer hub.

**Opportunity to develop new domestic routes for the Mercedita Airport in the Municipality of Ponce under the Federal Department of Transportation’s Essential Air Services Program.** The Federal DOT’s Essential Air Services Program offers a subsidy to an airline to provide service from an eligible community to a medium or large hub, as classified by the FAA. A qualifying small hub might also meet the criteria. In the past, American Eagle and Cape Air operations were subsidized under this program.

**Calls have been made to “re-shore” the production of certain pharmaceuticals.** The SPREDD region could benefit should this policy initiative advance.

**Some stakeholders believe there have been great strides in the areas of entrepreneurial development in recent years.** Although not specific to the region, there have been numerous initiatives and programs aimed at entrepreneurial assistance in Puerto Rico like Grupo Guayacan’s EnterPRize, StartUp.PR and Parallel 18. One of the most recently created is the Rising Entrepreneurs Program, which is sponsored by the Bravo Family Foundation.

The program is strategically designed to provide small tech cohorts with a deep immersion experience that develops their skills and shows them how to start and run an efficient business and strategies to grow and scale sales. Bravo connects the participants with a global network of investors, companies and senior executives in the business, technology and software industries. The foundation is able to make these connections, as Orlando Bravo, is from Puerto Rico and is the Managing Partner of Thoma Bravo, a leading private equity firm focused on the software and technology-enabled services sectors, with over \$76 billion in assets under management.

**Stakeholders believe there is significant potential to develop the coastal area of the region for additional recreational activities such as nautical tourism.** One of the recommendations from stakeholders was to implement anchoring moorings along the coast, which could result in additional opportunities to further develop the Ocean Economy.

**Alternative strategies/development for the Port of the Americas/Ponce.** Expanded and substantial development of the Port of the Americas/Ponce was originally conceived in the late 1990s as a cargo transfer hub for Post Panamax ships able to traverse the expanded Panama Canal. (Expansion of the Panama Canal to accommodate Post-Panamax ships was completed in 2016.) For a variety of factors, this vision for the Port of the Americas did not materialize, and

Kingston, Jamaica has emerged as a preferred transfer hub for this traffic. Even though the original strategy did not materialize, alternative development strategies have emerged. Among the alternative development strategies (opportunities) for the Port of the Americas are:

1. Develop the port into a training center for yacht personnel.
2. Establish a shipyard services and repair center.
3. Establishing a Jones Act compliant ship building facility.
4. Further develop the port(s) to be able to receive agricultural supplies and equipment to support the industry in the region. At present, farm machinery and equipment are received only in San Juan.

**There is an increasing awareness of the value of agriculture to Puerto Rico.** Part of this enhanced awareness was brought about by the natural disasters and the ensuing lack of food in the immediate aftermath. However, Puerto Rico imports approximately 85% of the food it consumes, as the island is not capable of producing enough food to feed all of the inhabitants.

**Calls have been made to completely redesign Puerto Rico's energy generation and distribution system.** Stakeholders have recommended a form of direct transmission from the generating assets located in the region, which supply power for all of Puerto Rico. (See Chart 9 on Page 19), where the Utilities Sector is noted for having the highest Employment LQ.) By means of direct transmission, stakeholders believe electricity prices can be lower and make the region more competitive.

With respect to a redesign of the energy generating and distribution system, under the Puerto Rico Energy Public Policy Act, which was signed into law in 2019 (Act 17-2019), PREPA has to obtain 40% of its electricity from renewable resources by 2025, 60% by 2040, and 100% by 2050. The building of renewable energy parks to supply power to industries has also been recommended by stakeholders.

The U.S. Department of Energy is exploring the use of Small Modular (nuclear) Reactors (SMRs) in Puerto Rico, which may address the reliability and expense weaknesses noted. SMRs are used to power military ships and submarines and have been successfully used in remote parts of the world (Siberia) to generate electricity for decades. The U.S. Nuclear Regulatory Commission (NRC) issued its final safety evaluation report on NuScale Power's SMR design in August 2020. This accomplishment is the first of its kind for a SMR and puts NuScale on track to receive a full design certification from the regulator by August 2021. The SMR is capable of generating 60 megawatts without any need for additional water, power or even operator action. Upon receiving full certification, utilities will be able to reference the design when applying for a combined license to build and operate the new reactors in the United States.

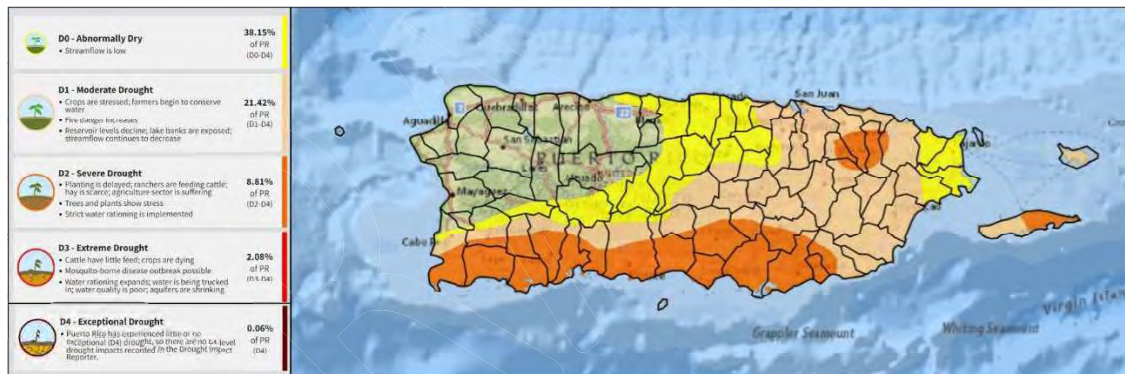
**There are many vacant and abandoned buildings that could possibly be repurposed for commercial use.** A clear example of an opportunity of this kind is giving a new use and purpose to the unutilized land that is left where the former Commonwealth Oil Refining Company (CORCO) operated. SPREDD recognizes EPA's efforts to establish the area as a brownfield and to lead the way in recent years to revitalize the PR-127 Corridor of Guayanilla and Peñuelas as a local and federal integrated effort.

## Threats

**Erosion or elimination of tax advantages, which are believed to be a primary driver of the manufacturing base.** If any legislation is enacted that would negate Puerto Rico's status as a foreign jurisdiction for income taxes, and/or if income tax rates were increased on the CFCs, prior events suggest that Puerto Rico and the region will lose manufacturing jobs.

**Further outmigration of skilled labor.** Prior to the earthquakes and the pandemic, economic indicators were positive, with Puerto Rico registering a small increase in GDP in 2019. Many stakeholders, as well as research institutions, attribute the outmigration of skilled labor to the poor economic conditions in the region.

**Failure to properly upgrade and maintain critical infrastructure** was noted as a threat by stakeholders. Stakeholders noted PREPA has neglected to properly upgrade and maintain critical infrastructure in the Region. Others also mentioned projects such as the dredging of the Guayanilla River and Bay, and a project for the sustainable and responsible management of the Southern Aquifer, as projects that they have been waiting for a long time, which affect their economies. The latter is a vital project to effectively manage water resources during droughts in the southern region, something that affects both the quality of life and the economy of the south.



Map 3: U.S. Drought Monitor Conditions for Puerto Rico, June 2020, NOAA-NIDIS. The area shown in the map in orange color indicates Severe Drought Conditions completely covers the SPREDD Region.

It is expected that one of the main effects that the implementation of this CEDS will have is that the organization that maintains the SPREDD will help the mayors, and other stakeholders of the southern region identify problems with the infrastructure that impact them economically, or that do not allow them to grow, mainly those that have to do with the maintenance and mitigation of risks and hazards in their critical infrastructure. Collaboration will be key to finding achievable solutions to the identified problems.

**The region is susceptible to additional natural disasters (hurricanes, earthquakes, droughts), as well as additional risks from climate change, such as sea level rise, etc.** Although this is a threat, certain components of natural disasters appear to be understood by major employers in the region. For example, the following is a risk factor noted in Medtronic's latest annual report: *"In addition, several of our key products are manufactured or sterilized at a particular facility, with limited alternate facilities. If an event occurs that results in damage to or closure of one or more of such facilities, such as the damage caused by Hurricane Maria in Puerto Rico in September 2017, we may be unable to manufacture or sterilize the relevant products at the previous levels or at all.*

*Because of the time required to approve and license a manufacturing or sterilization facility, a third-party may not be available on a timely basis to replace production capacity in the event manufacturing or sterilization capacity is lost.”*

**The U.S. Treasury Department has stated that the credit U.S. firms receive for paying excise taxes under Puerto Rico’s Act 154 is questionable and was never intended to be permanent.** In October 2010, the Government of Puerto Rico (GPR) enacted Act 154-2010 to establish a 4% Excise Tax on certain personal property and services transactions between related entities for taxable years commenced after December 31, 2010. Act 154 was approved without hearings, and the companies impacted raised concerns about the ability to credit Act 154 taxes against U.S. income taxes, as it is an excise tax and not an income tax. In April 2011, the IRS issued Notice 2011-29, which essentially stated that it would not challenge the credit-ability of the 4% Excise Tax as a foreign tax credit, as the taxpayers have taken the position that the excise tax is a tax in lieu of an income tax. Some have labeled the IRS’ position on this issue as a “backdoor bailout”<sup>23</sup>, as the credit-ability effectively created a federal subsidy for on the Excise Tax paid to Puerto Rico. Originally slated to be eliminated by December 31, 2016, (near the end of the Obama administration) the Excise Tax was extended until December 31, 2027 by the administration of Gov. Ricardo Rosselló through Act No. 3 of 2017.

Former U.S. Treasury Secretary Steven Mnuchin visited Puerto Rico in March 2018, and publicly commented that the credit-ability of the Act 154 Excise Tax was not intended to be permanent and that the Trump administration intended to end the provisions of Notice 2011-29; however, this did not occur. The Biden administration has not indicated any positions on this issue. Should the ability to credit these excise tax payments against U.S. income tax payments, the reaction of the pharma and medical device industries is uncertain.

**Continuing and/or new pandemic-related lockdowns could decimate certain sectors of the regional economy.** Tourism/Accommodation and Food Services would be the most impacted sector. At present, nearly 5,000 persons, or 8% of the employment base, is employed in this sector.

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<sup>23</sup> Reuters 'Backdoor bailout' boosts Puerto Rico's revenues February 10, 2014

## STRATEGIC DIRECTION / CALL TO ACTION

**Background:** As referenced in the SWOT analysis SPREDD has significant potential for economic growth through building economic development capacity. The following strategic direction and action plan is presented in order to achieve that goal. This process begins with the adoption of a vision statement and goals from which come exact objectives and specific action plans to implement each. This effort is designed to align with other municipal, regional and island wide economic development planning, including the Southern Puerto Rico Chamber of Commerce and the Puerto Rico Planning Board. The latter has a CEDS in place and has been given the authority to submit this CEDS as well.

**Vision:** The Southern Puerto Rico Economic Development District will position its six municipalities as leaders in building capacity, successfully implementing strategic initiatives, and improving the quality of life for all the region's citizens.

**Mission:** The mission of SPREDD is to build economic development and economic growth capacity through a united regional effort centered around the five strategic initiatives developed by regional leaders and endorsed by EDA.

**Goals:** SPREDD has five goals corresponding to the initiatives presented in this document. They are:

1. **Build economic development capacity within the region.**
2. **Maximize benefits of Port of the Americas in Ponce.**
3. **Provide targeted support for most promising industry sectors/clusters.**
4. **Address specific issues/opportunities to build additional economic development capacity.**
5. **Support creation of a regional resilient sustainable development initiative centered on blue and green infrastructure as a global best practice.**

Although some of the weaknesses and threats previously identified in the SWOT Analysis are not under the control of the SPREDD, clarification is made through SPREDD goal number 4, having the effect of identifying them and that as the process moves forward, those issues will be addressed and routed through the official and authorized channels of communication with the State Agencies supporting this CEDS effort. Clear and timely communication through established channels both internally and externally will be an important part of the implementation of this CEDS.

The following five strategic initiatives are to implement the goals stated above through detailed and prioritized action steps, developed with active input from stakeholders throughout the region and flowing from the SWOT analysis.

### **Initiative 1. Build economic development capacity within the region.**

Southern Puerto Rico has extraordinary potential to climb out of their current poverty rates and into prosperity. But to affectively do that, the region must build economic development capacity through establishment of a governing organization for SPREDD's operations, professional education and training for economic development professionals, coupled with establishing an economic development department or organization in each municipality (currently only the Municipality of Ponce has such an entity in full operation), and developing relationships with national and international professional organizations. Finally, SPREDD should collaborate with the Southern Puerto Rico Chamber of Commerce to build regional capacity.



**A. Establish SPREDD as a catalyst for capacity building throughout Southern Puerto Rico.** Through successful submission of this document, and approval by EDA, SPREDD will be organized as a 501(c)3 nonprofit organization for the express purpose of improving the quality of life in southern Puerto Rico by increasing capacity for economic development. The following action items should be taken to accomplish this goal by September 30, 2021:

1. Establish an organizational structure from which SPREDD can successfully operate. SPREDD must file for incorporation as a registered nonprofit Puerto Rico corporation, and concurrently must apply for 501(c)3 designation by the Internal Revenue Service. This is a requirement for designation as an EDD.
2. Appoint a board of directors comprised of leaders representing all six municipalities in the SPREDD region. A board of directors containing leaders in the private and nonprofit sectors must be appointed, and an initial training session must be held so that they may understand their duties.
3. Secure office facilities and hire competent staff to manage the operation and oversee successful implementation of the initiatives and activities outlined in the CEDS.

**B. Develop professional training, education, and information for economic development professionals throughout the region.**

The SPREDD region has a shortage of well-trained economic development professionals. To address this shortage, a robust economic development professional education system must be developed and implemented, with the goal of training 100 professionals by September 30, 2022.

1. Establish a relationship with the National Association of Development Organizations (NADO) and organize an initial site visit and workshops to train SPREDD board and staff on how EDDs operate.
2. Develop and deliver a set of workshops on foundational principles and practices of economic development for both professionals and volunteer leaders in the region.
3. Provide ongoing access to information and best practices through creation of a resource library within the eddpr.org website.
4. Encourage participation in NADO and similar organizations that provide professional development workshops and courses, and for professional certifications in the field.

**C. Support establishment of economic development organizations for each municipality, focused on workforce, expansion/retention, entrepreneurship, and attraction.**

1. Provide advice and counsel to help support establishment of either public, public private, or private economic development organizations in each municipality.
2. These organizations would:
  - a. Market their municipalities to attract jobs and investment, provide support to existing companies around either retaining existing jobs or creating new ones through expansion, and support entrepreneurship and small businesses. These are complementary activities that can be made more successful through primary activities in building economic development capacity in the region.

**D. Support/partner with the Southern Puerto Rico Chamber of Commerce to build capacity.**

1. The Southern Puerto Rico Chamber of Commerce should be viewed as a valuable partner in all these efforts. Establishing an ongoing relationship with the Southern Chamber is critical to the success of all initiatives SPREDD is undertaking.

2. Through both formal and informal agreements, establish and maintain a close working relationship with the Southern Chamber.

**E. Support the Existing Third Sector Capacity Building LabF3S Initiative.**

1. LabF3S is an initiative of the Titín Foundation, supported by the EDA Economic Recovery Support Function, designed to increase capacity of the nonprofit sector. The initiative focuses on ensuring nonprofits obtain 501c3 or 1101 designation from the PR Treasury and/or IRS for grant eligibility, providing information on philanthropic and federal grant opportunities, and training in grant application, administration, and post award management. SPREDD will support this initiative both as an economic capacity initiative and a component of the Ocean Economy Resilience Strategy initiative.

**Initiative 2: Maximize benefit of Port of the Americas in Ponce.**

The Port of the Americas is widely regarded as an underutilized, but substantial resource for the entire region. The port has unique capabilities including roll on and roll off capability for vehicle transportation and ample room for shipbuilding, ship retrofitting, and even ship dismantling operations. However, issues of ownership and administration have plagued the port for years. Now it is under one controlling entity and is poised to finally reach its potential. The following three action steps should be taken:

- A. Identify opportunities for container transshipment by utilizing the region’s foreign trade zone.**  
Foreign Trade Zone (number 163) containing 291 acres, is divided into four locations, including the Port of the Americas in Ponce, the Mercedita Industrial Park, the Port of Guayanilla, and an industrial area in Guayanilla. Starting with the Ponce Port and working with both Port administration and the Puerto Rico Ports Authority, thoroughly investigate potential transshipment opportunities, starting in the Caribbean, then in order, Central America, South America, Europe, Africa, the Middle East, and Asia. Develop and distribute research on advantages of the Foreign Trade Zone, the Port of the Americas, and southern Puerto Rico while concurrently identify and seek funding via grants and/or public private partnerships to meet facility and equipment needs for robust transshipment operations. As noted in “Weaknesses,” this strategy may be challenging because of regulatory and market timing issues based on Post-Panamax opportunities.
- B. Feasibility analysis and strategy to develop a ship dismantling operation (Ghost Fleet).**  
The advent of increasingly larger container ships coupled with increases in average age of the global fleet, now over 20 years old, has led to significant demand for ship repair, retrofitting, and dismantling. Dismantling is most feasible because the Port of the Americas does not have a drydock, necessary for repair and retrofitting. A feasibility analysis should be conducted to evaluate the market, current port facilities, and opportunities for competitive entry by the Ponce and/or Guayanilla, which has a small drydock.
- C. Develop shipbuilding opportunities under the Jones Act, beginning with workforce training.**  
The Jones Act, passed in the aftermath of World War I, was intended to enhance national security by requiring goods moved between U.S. ports to only use U.S. built, registered, and crewed ships. While there are costs associated with the act, one advantage is that it protects the market for U.S. Shipbuilders. An industry that produces \$14.0 billion in annual economic output and 84,000 jobs in U.S. shipyards. The industry remains very competitive, therefore developing a highly trained workforce is essential to gain certification and attract shipbuilding companies. Planning a robust

training initiative and using that as a foundation to obtain certification and attract shipbuilders will create the foundation for the Ports in Ponce and Guayanilla.

**Initiative 3: Provide targeted support for most promising industry sectors/clusters.**

Based on a preliminary cluster analysis by EDA ERSF, with added input from the stakeholder session and survey, nine promising current and emerging industries seem to have the most potential for growth in the SPREDD region.

1. Medical device manufacturing
2. Pharmaceutical manufacturing
3. Value-added agricultural production/export
4. Tourism and Creative Industries
5. Transportation and Logistics (Port and Airport)
  - a. Shipbuilding, repair, and dismantling
  - b. Private and small air cargo aircraft repair
6. Aquaculture and Blue Infrastructure Development
7. Furniture and related specialty products manufacturing
8. Healthcare, focused specialized care to attract foreign patients (medical tourism) by means of capitalizing on the healthcare-related assets in the region.
9. Information Technology, focused on non-crypto blockchain, internet of things, and AI

**A. Bring representative company leaders from each sector together to discuss needs and opportunities.**

By collaborating, industries can achieve more than working apart. Identify universal issues like workforce and transportation that do not require a high level of interdependence and trust. Initial success in such issues has been proven to build those traits, which can then serve as a foundation for more interdependence to explore joint purchasing, marketing, and even production/distribution. Moving from destructive competition to collaboration and trust will move these from sectors to clusters.

**B. Work with the Southern Puerto Rico Chamber of Commerce and regional industry groups.**

Work to assess infrastructure, workforce, and transportation/distribution needs. Often, companies struggle in silence because they are unaware of programs and services that may assist them. In addition, both individual companies and clusters can influence public funding and projects for both their interests and overall regional issues. Development of a real-time portal for businesses and communities to express their needs could be an effective way to have continuous communication with business, NGO, and community-based organizations to address common needs.

**Initiative 4. Address specific issues/opportunities to build additional economic development capacity.**

SPREDD's mission is to build capacity for economic development leading to economic growth in the six municipalities of Southern Puerto Rico. In order to achieve that growth, there are several initiatives that should be undertaken. These are separate but interconnected, as most growth efforts are, and though independent, should be addressed by leadership as an interdependent ecosystem.

**A. Lead development of microgrids for more reliable electric power.**

As documented in the SWOT analysis, electric power is both expensive and unreliable. One answer is to establish microgrids that can be more effectively managed, and that can help move Puerto Rico from generation using coal and crude oil to solar, wind, wave, and other forms of

clean energy production. This can also reduce the cost of electricity as well. The levelized cost of energy generated by large scale solar plants is around \$0.068/kWh, compared to \$0.378 in 2010, according to the International Renewable Energy Agency. Implementation of a microgrid or other alternative system for the SPREDD region may be aided by American Recovery Act and/or Rebuild America Act (still in Congress) funding. Collaboration with Puerto Rico government and Federal government agencies will be a necessity. Conversion of 50% of the SPREDD region to alternative forms of electric power should be accomplished by September 30, 2025.

**B. Pursue additional passenger and air cargo flights/routes for Mercedita Airport.**

Mercedita airport in Ponce has potential to grow significantly if the right opportunities are pursued. A white paper drafted by ERSF contract support and FEMA ERSF mission support outlines these opportunities, including:

- a. Regional air cargo—Mercedita has an 8,000 ft. runway, but due to both natural and manmade obstacles, only 6,000 ft. is usable. This length limits both larger passenger and larger air cargo landings. However, smaller cargo jets such as the Boeing 757, 737-100, and Airbus A-318 can safely operate there.
- b. Passenger flights—Both of the above mentioned medium sized jets in passenger configuration, plus commuter jets such as the Bombardier CRJ series, can safely operate. Currently there is only one daily flight serving the airport, and it lands and departs in the 3 am timeframe. SPREDD should lead a concerted effort to add additional passenger flights, including offering incentives to draw new airlines and/or new flights. These initiatives should be launched no later than December 1, 2021.

**C. Support new entrepreneurship programs.**

While currently there are efforts underway to stimulate entrepreneurship in the region, the advent of new opportunities such as the Blue Economy initiative should cause an examination of current programs and possible development of new ones. Teaching Entrepreneurship could start in primary and secondary education. The National Foundation for Teaching Entrepreneurship ([www.nfte.com](http://www.nfte.com)) provides a well-established program to integrate entrepreneurship into both, plus provides support for teaching outside the classroom, and for adults. Organizations such as NFTE can provide additional offerings for start-up and acceleration focused on transformative industries such as the Ocean Economy, and a strategy to attract venture funding containing features of best practice models should be initiated immediately. The Inter-American Development Bank guide to Best Practices in Creating a Venture Capital Ecosystem can provide a blueprint for such a strategy- (<https://publications.iadb.org/publications/english/document/Best-Practices-in-Creating-a-Venture-Capital-Ecosystem.pdf>). This initiative should be launched no later than February 1, 2022.

**D. Support a Center of Innovation to link University research with business and industry.**

To support effective technology transfer mechanisms and increase commercialization of university research by business and industry, including startups, a Center of Innovation should be established. The Federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs (<https://www.sbir.gov/funding>) provide funding for technology transfer centers through periodic solicitations. Several agencies, including Department of Energy, National Institutes of Health, and National Science Foundation periodically offer grant funding for centers for technology development and commercialization. SPREDD should develop a business plan for a regional Center of Innovation to be prepared to apply for funding to establish and operate such a

Center, in partnership with universities in the region. SPREDD should complete the business plan by June 30, 2022 and plan to have the Center in operation by June 30, 2024.

**E. Develop capital access strategies (SBA 504, SBA Microloan, CDFI, Angel Investor Networks)**

Critical to building economic development capacity is access to capital by businesses at all phases of growth, from start-up to mature status. SPREDD will implement this initiative through both direct and indirect programs, as follows:

1. SBA Certified Development Company/504 Fixed Asset Financing Program

One popular program many EDDs administer is the SBA =504 program (<https://www.sba.gov/funding-programs/loans/504-loans>). The CDC/504 Loan Program provides long-term, fixed rate financing of up to \$5 million for major fixed assets that promote business growth and job creation. SBA 504 loans are available through Certified Development Companies (CDCs), SBA's community-based partners who promote economic development within their communities. CDCs are certified and regulated by the SBA. Funding for loans is provided directly by SBA, so there is no need for SPREDD to raise capital for these loans. There are underwriting and servicing requirements, and SBA provides a servicing fee to CDCs. SPREDD should consider this program and if it decides to move forward, should submit an application to SBA by August 31, 2022.

2. SBA Microloan Program

Another popular lending program is the SBA microloan program, which provides loans up to \$50,000 to help small businesses and certain not-for-profit childcare centers start up and expand. The average microloan is about \$13,000. The SBA provides funds to specially designated intermediary lenders, which are nonprofit community-based organizations with experience in lending as well as management and technical assistance. These intermediaries administer the Microloan program for eligible borrowers. To be eligible as an intermediary, SPREDD must have at least one year of lending experience and have the capacity to administer the program (<https://www.sba.gov/document/support-how-become-microloan-intermediary>). Due to the lending experience requirement, SPREDD should not apply before January 31, 2023, or when it can demonstrate one year of lending experience.

3. Community Development Financial Institution (CDFI) Program

Many automatically think of New Markets Tax Credits, the largest CDFI program initiative, that is incredibly competitive and has significant barriers to entry. However, the CDFI grant and technical assistance funding programs, while still given on a competitive basis, can be a good source of funding for lending and technical assistance programs. The CDFI Program ([www.cdfifund.gov](http://www.cdfifund.gov)) offers both Financial Assistance and Technical Assistance awards to CDFIs. These competitive awards support and enhance the ability of these organizations to meet the needs of the communities they serve. Financial Assistance awards are made in the form of loans, grants, equity investments, deposits, and credit union shares, which CDFIs are required to match dollar-for-dollar with non-federal funds. This requirement enables CDFIs to multiply the impact of federal investment to meet the demand for affordable financial products in economically distressed communities. Technical Assistance grants are offered to CDFIs and Certifiable CDFIs (see eligibility below) to build their organizational capacity. SPREDD should explore becoming a Certified Development Entity, the first step toward CDFI funding, and then consider applying for either/ both matching loan/grant/equity and technical assistance grants and decide by February 28, 2023.

#### 4. Angel Investor Network(s)

Focusing regional wealth on new venture creation has been successfully implemented in many regions. In fact, angel investors support up to 90% of outside equity raised by startups (after friends and family). Angel networks provide start-ups with seed capital through accredited investors who come together to jointly invest, spreading risk for them and allowing greater opportunity for entrepreneurs. The Angel Investor Network (<https://www.angelcapitalassociation.org/>) an industry association of over 250 angel investor networks, can provide guidance on structuring a successful network. SPREDD should develop a Southern Puerto Rico angel network and have it in place by September, 2022.

#### **F. Further development of Tourism, Arts/Crafts, and Entertainment Industries (cruise ships).**

Tourism is a mainstay of the SPREDD region. Each Municipality has compelling food, hospitality, historic sites, lodging and amenities, plus activities such as ocean-related and experiential/ecological tourism. Puerto Rico has an advantage in that it is a unique part of the United States, and there are no international barriers for U.S. Citizens. Southern Puerto Rico should fully capitalize on this opportunity, through advocacy for the region with destination marketing organization Discover Puerto Rico and the Puerto Rico Tourism Company. SPREDD should also work with the Municipalities and the tourism industry in seeking federal funding to upgrade facilities Sustainable tourism, including experiential tours in which participants help restore and protect ecosystems, is increasing rapidly. A 2018 report by the Organization for Economic Cooperation and Development provides guidance on how to attract financing and investment in this fast-growing segment:

[//www.oecd-ilibrary.org/docserver/tour-2018-](http://www.oecd-ilibrary.org/docserver/tour-2018-7en.pdf?expires=1619027621&id=id&accname=guest&checksum=2B0490C0CA153E27D4DF0512AD770D3F)

[7en.pdf?expires=1619027621&id=id&accname=guest&checksum=2B0490C0CA153E27D4DF0512AD770D3F](http://www.oecd-ilibrary.org/docserver/tour-2018-7en.pdf?expires=1619027621&id=id&accname=guest&checksum=2B0490C0CA153E27D4DF0512AD770D3F). SPREDD should develop and begin a

SPREDD should begin implementation of this initiative no later than November 1, 2021.

#### **G. Have a robust workforce training programs and talent recruitment initiatives ready when needed.**

Rapid changes in technology and new ways of doing business already underway before COVID19, and accelerated greatly by the pandemic, make real time skill development critical for keeping workforce at optimum productivity. No longer is it enough to implement stagnant programs that train people for jobs that could be obsolete by the time they complete training. A new approach is needed, one that can be quickly implemented in real time to ensure training is literally up to the minute. By staging and continuously updating curriculum, institutions of higher learning will be ready when demand increases. This “flex-skills” approach is revolutionary in that it won’t train people in skills that may either be obsolete or may not be needed in Puerto Rico, causing outmigration to the continental United States. SPREDD should begin working with education and training institutions to implement flex-skills by May 31, 2022.

#### **H. Improve infrastructure through grants and PPPs; create a robust inventory of buildings and sites.**

Though SPREDD is not being created to recruit new investment and jobs, it will be responsible for providing improved infrastructure through federal grants and work with the Puerto Rico Public Private Partnership Authority to bring the region’s infrastructure to standard. The first step to that goal is to complete a prioritized assessment of infrastructure needs and begin seeking grant funding for their repair. As that initiative begins in earnest, SPREDD should then begin a comprehensive inventory of available buildings and sites for economic development organizations (EDOs) in the region, focusing on ensuring available buildings are fit for use, and documenting deficiencies so that EDOS are aware of those needs. SPREDD should begin the infrastructure assessment immediately and complete an initial

version by June 30, 2022, with full implementation of both infrastructure and building/site inventory by June 30, 2023.

**I. Develop a strategy for universal business broadband access & utilization plus cybersecurity training.**

Access to broadband technology has continually increased in importance over the past two decades, and COVID19 exponentially accelerated the need for universal broadband access. That fact, along with the advent of cyberattacks and cybercrime, have created a pressing need for businesses to have access to and effectively utilize broadband and be trained in cybersecurity. As new industries emerge, the need for access and training will continue to increase. SPREDD will implement an initiative in partnership with business leadership to increase broadband access through both federal funding and public private partnerships, and work with capacity-building organizations such as the nonprofit Intelligent Community Forum (<https://www.intelligentcommunity.org/>), and implement cybersecurity training through training organizations such as Cybersecurity Non-Profit (<https://www.csnp.org/>). SPREDD should launch this initiative by December 31, 2022.

**5. Support a multi-institutional regional initiative centered on blue and green infrastructure.**

Valuing natural infrastructure such as coral reefs and mountainside trees both increases resilience and leads to sustainable development. New recognition of the contribution of these assets to protect the built environment, and their value to sustainable development such as ecotourism and carbon credits, is becoming fully recognized. As the southern coast and mountains of Puerto Rico is rich in natural infrastructure, SPREDD will support a multi-institutional effort to value and sustainably develop it. This initiative will first focus on blue infrastructure, including coastal (i.e. mangroves) and ocean (i.e. coral), then consider green infrastructure (mountain vegetation) inland, while integrating federal and philanthropic grants, facilitating establishment of value through parametric insurance, and leveraging that value for both preservation (based on reduction of risk to public and private built environment) and sustainable development (earning carbon credits for planting mangroves, enhancing fisheries through hydroponics). SPREDD will reach out to the Blue Tide and Center for Resilience, Economic Policy, and Strategic Economic Development (CREPSED) initiatives and support their efforts, focused on the southern coast as the pilot project for this initiative. SPREDD should begin support efforts immediately and continue through the life of this CEDS.

## ECONOMIC RESILIENCE

According to the Federal Emergency Management Agency (FEMA), “Resilience is the capacity of individuals, communities, businesses, institutions, and governments to adapt to changing conditions and to prepare for, withstand, and rapidly recover from disruptions to everyday life, such as hazardous events.” Southern Puerto Rico understands disruptions to everyday life more than most any location in the world, as a frequent victim of hurricanes, and recently earthquakes and the COVID-19 pandemic. Stakeholders universally stated the need for more—more rapid response, more effort in recovery, and more hazard mitigation. To achieve more in all three categories of resilience, a bold action agenda is critical. Taking resilience into their own hands will allow the SPREDD region to control its destiny regarding adverse events, and to have a more defined input in the public policy formulation processes that affect them, as in the case of Hazard Mitigation Plans. Following EDA CEDS guidelines, increasing resilience will rely on the following actions:

### I. PLANNING FOR AND IMPLEMENTING RESILIENCE

#### A. Establish a Resilience Task Force and Create Action Plan with Four Components.

The first step in increasing resilience is to establish a regional economic resilience task force to guide the resilience-enhancing process. The task force should include representatives from each municipality, Puerto Rico and Federal government agencies, regional and local third sector nonprofits (NGOs), economic development organizations (EDOs), SPREDD leadership, and industry representatives. The task force will serve as a central point of action, working with governments, municipalities, EDOs, NGOs, and industry to fund and implement resilience-enhancing actions. The resilience task force should be organized and begin working no later than December 31, 2021.

##### 1. Draft a regional economic resilience action plan, including resilience of SPREDD itself.

Immediately on formation of the Task Force a regional economic resilience action plan should be developed. The plan should focus on whole community resilience, with emphasis on helping businesses and institutions develop and implement continuity of operations plans and ensuring that essential services can be provided in the wake of a disaster. The Task Force may also consider contracting with subject matter expertise for development and implementation to ensure the plan is successful. The action plan should be a living document, able to change as circumstances merit. National and International best practices in resilience planning are readily available for guidance in drafting the plan. An implementation tracking system for action plan should be developed and administered by a cloud-based program such as Microsoft Teams. The action plan should be completed by June 30, 2022.

##### 2. Establish a regional BEOC, alone or within existing emergency management (EM) centers.

Regional Business Emergency Operations Centers (BEOCs) are gaining in popularity nationwide. While the primary function of BEOCs is emergency communications, many also provide ongoing information on response, recovery, and ongoing resilience for businesses in the region. Critical to BEOCs is the relationship with local emergency management offices, and some BEOCs are co-located at EM offices. The Resilience Task Force should explore these options, work to secure both initial and ongoing operational funding, and work with local EM officials to successfully implement a BEOC by December 31, 2022.

##### 3. Create and curate a resilience information section on the [www.eddpr.org](http://www.eddpr.org) website.



Information and resources for the SPREDD region, including direction on how to integrate resilience into other local and regional resilience efforts, such as land use, economic development, and redevelopment planning, should be placed on the [www.eddpr.org](http://www.eddpr.org) website under “SPREDD Regional Resilience Resources’. Highlighting this resource can help ensure engagement of community stakeholders including community organizations, nonprofits, workforce organizations, and private infrastructure providers such as broadband, cellular, and others (nationally, 85% of infrastructure is private).

#### **4. Value and Restore/Develop Natural (Blue and Green) Resilience Infrastructure**

Valuing natural infrastructure such as coral reefs and mountainside trees increases resilience. New recognition of the contribution of these assets to protect the built environment, and their value to sustainable development such as ecotourism and carbon credits is becoming fully recognized. As the southern coast and mountains of Puerto Rico is rich in natural infrastructure, SPREDD will support a multi-institutional effort to value and sustainably develop it. This initiative will first focus on blue infrastructure, including coastal (i.e., mangroves) and ocean (i.e. coral reefs), then consider green infrastructure (mountain vegetation) inland while integrating federal and philanthropic grants, facilitating establishment of value through parametric insurance, and leveraging that value for both preservation (based on reduction of risk to public and private built environment) and resilience (restoring coral reefs, planting mangroves). In addition, the LabF3S non-profit capacity building initiative can play a critical role in building capacity for non-profits in the SPREDD region to secure grant funding for Natural Infrastructure valuation, preservation, and development. SPREDD will support LabF3S, reach out to the Blue Tide initiative and Center for Resilience, Economic Policy, and Strategic Economic Development (CRESPED) initiatives and support their efforts, focused on the southern coast as the pilot project for this initiative. SPREDD should begin support efforts immediately and continue through the life of this CEDS.

#### **5. Developed a public relations response plan for incidents of any type.**

A critical, but often overlooked resilience initiative is to develop a public relations plan to enable united, solid response in case of local and/or widespread press coverage. Clear, transparent, and consistent messaging should be developed and agreed to by all six municipalities, designed to inform and reassure businesses and citizens, in the community while providing a coherent message of resilience to the outside world.

SPREDD will work with its municipalities and stakeholders to develop the system by September 30, 2022.

#### **6. Utilize FEMA’s BCA tool and PPPs to leverage resilience investments.**

FEMA’s Benefit Cost Analysis (BCA) tool is designed to document the benefits of resilience investments and is required to apply for Hazard Mitigation Grant Program funding. Using the BCA, the SPREDD region can also develop public private partnerships (PPP), both hard (built environment) and soft (programmatic) PPPs. It can also be used as justification for providing incentives for business and industry to invest the time and effort necessary to develop continuity plans, and to justify dedication of resources to protect and restore essential services such as power, water, and telecom infrastructure. The task force should provide training to key staff in how to operate the BCA (a comprehensive, nine-part course including presentations and workbooks is available free from FEMA), and work with municipal governments and the Puerto Rico PPP Agency to explore PPPs as a viable way to leverage infrastructure investments. BCA utilization capability should be in place by June 30, 2021; PPP efforts should be ongoing.

## **7. Utilize blockchain technology to improve effectiveness of Federal funding for property reconstruction.**

One of the most prevalent challenges to the SPREDD region's ability to recover quickly is poorly maintained property records; identified as a problem throughout Puerto Rico. The lack of reliable property records may prevent many survivors from receiving aid for repairs to their property. Moving property ownership records to Blockchain has been, or is in the process of being done, successfully in Chicago, parts of Sweden, and Honduras, among others. By having clear, transparent, and immutable validation of property ownership, recovery and resilience aid can be distributed more effectively. A possible source of funding, the Blockchain Trust Accelerator (BTA) (<https://www.newamerica.org/digital-impact-governance-initiative/blockchain-trust-accelerator/about/>), builds Blockchain pilots that have meaningful social impacts. BTA operates as a nonprofit with support from the Rockefeller Foundation. SPREDD will assemble a working group to develop a brief proposal for BTA in implementing a regional pilot project by September 1, 2023.

### **B. Initiate Initiatives to Enhance Small Business Resilience and Recovery**

Small businesses are especially vulnerable to disasters. Unlike large companies, they generally do not have reserve capital to withstand damage and/or interruption, and less than 30% have business continuity (resilience) plans. To address those issues in the six municipalities that comprise the SPREDD region, the following should be implemented during the term of this CEDS:

#### **1. Develop emergency funding sources for small businesses.**

FEMA states a sad statistic: after major disasters, 40% of businesses never reopen. One of the keys is funding to survive and reopen until federally backed funding (SBA Disaster Loans, CDBG-Disaster Recovery Business Loans) arrives. The most successful of these emergency funds have been originated by the third sector, which agreed in advance that when disaster strikes, they will immediately put funding in place for small (\$10,000-\$20,000) survival loans to keep businesses from closing forever. Using a triage system developed after 9-11, businesses that have been damaged but can still survive with help will be prioritized from those that unfortunately cannot be saved or those that can survive for the time being.

#### **2. Provide information on types and importance of insurance protection by type of hazard.**

Many small business owners are unaware of specific insurance that is both affordable and critical to their survival after disaster. These include business interruption policies, the National Flood Insurance Program (NFIP), and Insurance-Linked Securities such as Catastrophe Bonds. These disaster-specific insurance products may be the difference between survival and failure for many businesses.

#### **3. Implement education and awareness initiatives for small businesses.**

Often, small businesses are unaware of many response and recovery operations/ resources available for them in recovery. SBA disaster loans, CDBG-DR loan programs, Small Business Development Center advice and counseling, and aid to communities through Public Assistance to repair public infrastructure damage may help businesses in recovery, but only if businesses know how to access them. Providing information (pre-recorded videos, guidebooks, etc.) can make a difference as businesses struggle to recover.

**4. Develop assistance for local businesses in securing response and recovery contracting.**

Often, local businesses that are struggling due to damage and/or interruption may miss the chance to obtain contracts and/or sell goods to recovery operations. This business may make the difference between survival and failure, but not without knowledge of potential opportunities flowing from recovery funding. A recovery contracting/sales opportunity portal should be implemented to ensure local businesses are aware of these opportunities.

**5. Have ready-to-implement buy local awareness campaigns to help businesses in recovery.**

Often, disaster survivors are unsure or unaware of the status of businesses in their communities, and often go elsewhere to purchase (or increasingly, order goods and services online). A campaign to use local and social media to let the community know that businesses either escaped damage or are back up and running is critical to ensuring their customers do not go elsewhere. Preparing such a program for “plug and play” readiness should be completed before June 30, 2022.

**6. Develop a program to assist small and informal businesses in proper record-keeping.**

To meet public recovery assistance requirements, small and/or informal businesses such as fishermen or roadside food vendors, plus many others must keep records in a format that is required for aid from FEMA and other federal agencies. An outreach program with simple tools to help businesses keep better records could yield positive results for small and/or informal businesses of the SPREDD region.

**7. Work with local and state agencies to streamline zoning/permitting after disasters.**

To hasten small business recovery, communities affected by disaster, such as Branson Missouri that was devastated by a tornado in 2012, worked to temporarily ease restrictions on zoning and permitting. They gave small businesses a 60-day moratorium on having to meet some regulations (such as required parking spots) so they could resume operations quickly.

**II. ESTABLISHING INFORMATION NETWORKS**

**A. Create resilience hubs and develop resilience networks for small business.**

Resilience hubs have been funded in Puerto Rico, and SPREDD should apply to establish hubs in each of SPREDD’s six municipalities. Resilience hubs provide training before disasters, and serve as a shelter and source of information after disasters. In addition, small business resilience networks have shown to increase collaboration and cooperation in bringing them together to help each other in disaster, including sharing space, working together to keep local businesses, and in some cases even joint production. Both these initiatives can increase small business survival.

**B. Develop relationships between SPREDD and critical infrastructure owners/operators/supply chains.**

Critical infrastructure is defined by FEMA as those assets, systems, networks, and functions so vital to the United States that their incapacitation or destruction would have a debilitating impact on security, national economic security, public health or safety, or any combination of those matters. Owners and operators such as municipalities, EDOs, and public and private interests (nationally, 85% of all types of infrastructure is privately owned) are essential to economic resilience. Of particular concern is that debilitation of critical infrastructure will interrupt business supply chains, affecting both suppliers and end users. SPREDD will work with organizations to ensure local businesses maintain access to supply chains through pre-incident contingency planning. Businesses, whether large or small, manufacturing or retail, rely on supplies of products and/or materials to continue operations. Supply chain resilience has become

a critical component of overall resilience, as amplified by the COVID19 pandemic. To support this effort, SPREDD should provide a toolkit of resources to enable businesses to implement contingency plans for supply chain interruption. SPREDD should have these relationships and resources in place by January 1, 2024.

**C. Develop relationships between SPREDD and State and Federal Emergency Management Agencies that manage and develop Hazard Mitigation Plans and Guidelines.**

Communication is a critical factor in the development of risk reduction and hazard mitigation alternatives that are complementary to programs and projects aimed at achieving economic resilience. Therefore, SPREDD will develop channels of communication with State and Federal Emergency Management Agencies to share information that supports the creation of projects that mitigate risks and hazards in local communities, and to maintain business continuity and accelerate business recovery after a disaster occurs. Participation in Hazard Mitigation working groups will be part of SPREDD's commitment. To support this effort, the SPREDD should offer information and provide communication venues that allow companies and organizations in the SPREDD to make their voices heard in these risk mitigation planning processes. SPREDD should have these relationships and communication venues in place by January 1, 2022.

**III. PRE-DISASTER RECOVERY PLANNING**

**A. Plan to enhance economic diversification by planning for resilience of key industry clusters.**

Economic resilience includes economic diversification, whether against natural disasters, man-made incidents, or most recently pandemics. COVID19 decimated economies very dependent on travel and tourism, while economies that included information technology, logistics and distribution, and production of essential goods often grew even in the worst of the pandemic. The following six steps can help diversify while accounting for vulnerabilities of the resident industry mix:

- 1) Identify specific vulnerabilities in key residential areas and targeted prospective industries, take action to mitigate those risks. (Use as primary reference all FEMA approved Hazard Mitigation plans of the SPREDD region municipalities and the inputs of Local Emergency Management leaders and experts.)**
- 2) Provide information on most likely hazards, and specific efforts underway to mitigate them, to EDOs in the region so they can in turn inform both existing industry clusters and prospects.**
- 3) Chart industry interdependencies and opportunities to enhance resilience via industry/government partnerships.**
- 4) Actively promote ongoing research, innovation, and actions to strengthen resilience, and recruit and/or grow a base of companies in the disaster recovery and resilience industries to both provide services quickly and diversify the economic base.**
- 5) Have a mechanism to provide live, updatable resource guides for industry clusters prior to and after incidents.**
- 6) Include training/information in individual resilience and strategies (transportation, childcare) so employees in industry clusters can better withstand incidents and return to work more quickly.**

## **B. Planning for Pandemics**

As this CEDS is being written, the global COVID19 pandemic is not yet under control, and we are still going to see the ramifications on the impacts and the ripple effect of all for months to come. Pandemics are particularly difficult to address, and the current affliction has forever changed both business and personal behavior. There are, however, actions that can be taken to mitigate some of the risks for this and future pandemics, as outlined in the following 3 steps. These efforts should be in place by September 30, 2022.

- 1. Work with local/state government to develop a detailed response effort to help adapt businesses and citizens to changes brought about by pandemics, including social distancing, digital business models, and similar measures.**
- 2. Create a contingency plan for infrastructure adaptation such as expanding healthcare and education facilities, caused by pandemics, using a combination of grants and public private partnerships.**
- 3. Have pre-registration programs for businesses, individuals and community organizations in advance of major disasters and pandemics so that they may return immediately after areas are declared safe.**

## **C. Planning for Cyber-Attacks**

Increasingly, cyber-related incidents are plaguing both industry and government. Recent high-profile attacks on the U.S. government and tech giants like IBM have dominated the headlines, but small-to-medium sized businesses, and even self-employed and gig workers have been subject to information theft and ransomware. Consensus by several organizations in the field is that in 2021 cyber-attacks will inflict damages totaling \$6 trillion nationally, and over \$10 trillion globally. To increase resilience of the regional economy to these incidents, SPREDD will implement the following three actions by September 30, 2023:

### **1. Serve as convener and coordinator of collaborative measures for critical cyber resilience.**

Working with owners/operators of critical infrastructure and public services such as power and water, implement resilience measures such as joint purchases of cyber protection systems, communications between owners/operators on cyber incidents, and joint recovery operations in partnership with local and Puerto Rico government emergency management agencies.

### **2. Provide training and assistance programs for business to create their own cyber-security plans.**

Numerous training programs, including FEMA's Emergency Management Institute, offer courses in Cyber Security are available for business and industry of all sizes. FEMA's EMI cyber training is here: (<https://training.fema.gov/is/courseoverview.aspx?code=IS-523>) Businesses, plus local government and nonprofit organizations can all receive training in how to develop and implement cyber security plans. SPREDD can provide messaging on these resources and assist organizations in obtaining them.

### **3. Develop options for alternative sources of critical infrastructure.**

Cyberattacks on infrastructure systems can create severe and long-lasting disruption. New technologies, such as water purification treatments, satellite-provided cell and broadband connections, and solar powered long-lasting battery power backup, can help businesses, government, and community organizations to survive and reopen.

#### **D. Planning for Terrorism, Geopolitical, and Industrial Incidents**

Adverse incidents are not at all limited to natural disasters and pandemics. Ask the people of Oklahoma City and New York, both of which were severely impacted by terrorism. Baltimore, Maryland, Minneapolis, Minnesota, and nations around the world have been impacted by geopolitical unrest, while states on the Gulf Coast and the town of West, Texas, were decimated by industrial incidents. Finally, disruptive technology can have severe negative impacts on a wide spectrum of industries, including online travel sites. To ensure elements of resilience are addressed for these incidents, SPREDD will lead and/or support the following efforts.

- 1. Work with emergency management agencies to create a contingency plan for businesses in case of terrorist attacks.**
- 2. Have an action plan to provide supplies of water in case of severe drought or terrorist-related water contamination.**
- 3. Create a program to incentivize/assist businesses to create a continuity plan specifically for terrorist attacks.**
- 4. Develop an economic response and recovery strategy for industrial incidents such as oil spills, explosions, etcetera.**
- 5. Create an initiative to help businesses respond to global geopolitical incidents such as conflicts over trade, external or internal conflict, and civil unrest.**
- 6. Create strategies for business adaptation to disruptive technology (energy sources, digitization, AI, robotics, etcetera).**

#### **IV. MEASURING RESILIENCE**

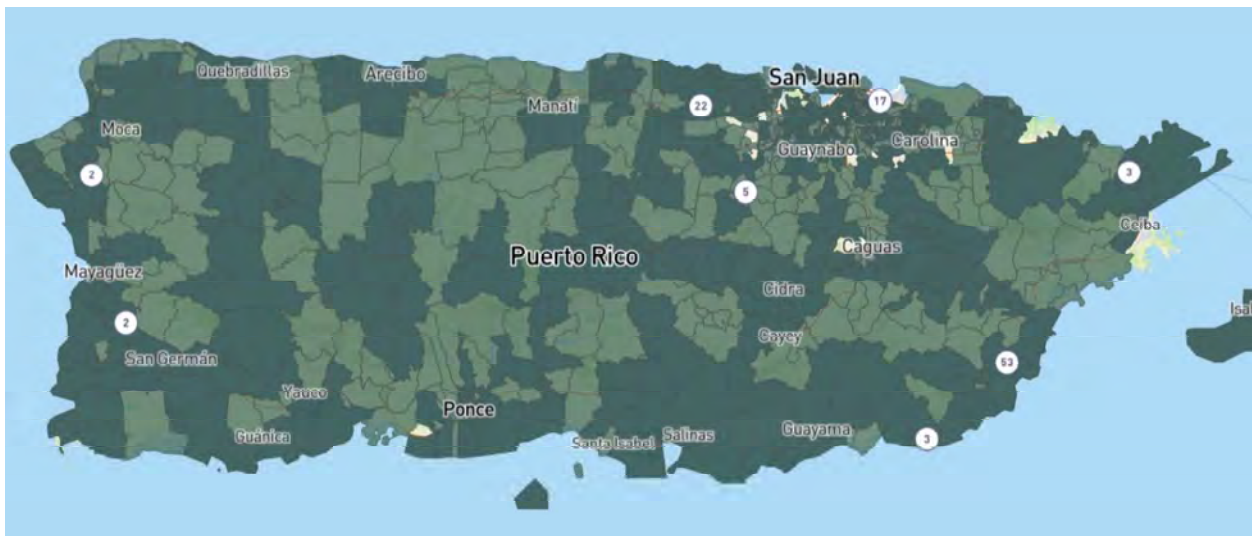
##### **A. Implement Economic Resilience Scorecard to Measure Improvements in Resilience.**

The provider of digital CEDS for SPREDD, Statebook International, offers a Resilience Scorecard as a value-added product. The resilience scorecard is an assessment in the form of a questionnaire that should take no more than an hour to complete. As questions are answered, an automatic score is generated based on the type of question, and once complete the total score is confidentially transferred to the EDD taking the assessment. The scorecard can provide SPREDD with an initial baseline of resilience, then as resilience actions are taken, can be used to measure progress in increasing resilience. It can also serve to show businesses, investment/site location executives, and other job-creating investors how resilient the SPREDD region is through an objective assessment of SPREDD's disaster risk the level of ability to withstand and recover from adverse incidents--and how it is taking action to decrease that risk.

## OPPORTUNITY ZONES

According to the U.S. Department of the Treasury and DDEC, Puerto Rico was given preferential treatment with respect to designating census tracts as QOZs. This preferential treatment resulted in all low-income census tracts in Puerto Rico being designated as QOZs. Because Puerto Rico has a poverty rate of 43.1%, approximately 98% of Puerto Rico's landmass is a QOZ. A similar proportion of SPREDD's landmass is also designated as an QOZ, as only a single census tract (72113073008) in Ponce is NOT a QOZ. In essence, CEDS for the region and the QOZ are in lockstep.

Comparatively, only 25% of the census tracts in a state can be designated as QOZs.



Map 4: Opportunity Zones in Puerto Rico. Light green areas are QOZ tracts designated in the 2010 Census; darker green represents QOZ tracts updated in the 2020 Census. The uncolored space in the Ponce municipality is the only tract in the SPREDD region not designated a QOZ. Source: Policy Map and U.S. Department of the Treasury

With respect to the regional perspective, Puerto Rico became one of the first jurisdictions of the United States to enact legislation to complement QOZs. The Government of Puerto Rico approved Act 21-2019, known as “2019 Puerto Rico’s Opportunity Zones and Economic Development Act (Act 21).” The purpose of Act 21 was to “transform the Island into an idyllic jurisdiction for investments.” Later, Act 21 was incorporated into Act 60-2019, known as Puerto Rico’s Incentive Code.

Because of the preferential treatment provided to Puerto Rico, as well as the additional benefits provided under the Puerto Rico Incentive Code, the Department of Economic Development and Commerce of Puerto Rico (DEDC) has dedicated considerable resources to promoting QOZ development and investing. SPREDD will work closely with DEDC to advance QOZ investing and development.

The primary public interface for SPREDD is [www.eddpr.org](http://www.eddpr.org). This site will provide considerable information about the QOZs in the region and the benefits afforded. SPREDD will also be committed to working with private developers seeking to take advantage of the benefits provided by QOZs, especially when the plans advance initiatives in whole or in part. Adding cold storage capacity at Mercedita International Airport in Ponce would be an example.

## EVALUATION FRAMEWORK

SPREDD's leadership and stakeholders view the CEDS as a mechanism to formulate strategies able to transform the region by means of reducing poverty, outmigration, unemployment, and uncertainty, while increasing the overall prosperity and sense of place/personal bonds that many have for the region. By establishing an Evaluation Framework to measure these objectives, stakeholders and SPREDD leadership gain insight into the overall effectiveness of the CEDS. A well-constructed evaluation framework can also identify areas of the CEDS that may need to be adjusted.

The Evaluation Framework was compiled by means of answering the following:

- **Which conditions are important?**  
*Employment and prosperity increasing*
- **Which trends need to be reversed?**  
*Outmigration and lingering damage from hurricanes and earthquakes*
- **Which assets are available to be leveraged?**  
*Ports, Foreign Trade Zone, Tax Advantages, Blue Economy, Sectors noted on Page 33*
- **How will a strategy help achieve the economic vision?**  
*By means of a coordinated and regional approach*

In Strategic Direction / Call to Action, five primary goals were outlined, with numerous sub-tasks and deadlines noted. Tracking of progress on these goals will be made by using blockchain technology. Progress on these goals will be tracked through a series of transactions placed in a transparent, permanent, immutable ledger and verified by independent third parties. Blockchain has quickly become a mainstream technology and is being used in a wide variety of applications including large industry supply chains, large infrastructure projects, and the Department of Treasury and the Army are pursuing programs for device tracking using blockchain.

The data used to create the economic profile of the SPREDD included in this CEDS, as well as the economic indicators that we propose to follow to evaluate the impact of the activities mentioned here, come from different State Agencies from Puerto Rico and the United States, which are listed here (in alphabetical order):

### Puerto Rico

- The Economic Development Bank for Puerto Rico, Office of Economic Studies
- The Office of the Commissioner of Insurance of Puerto Rico
- The Puerto Rico Department of Economic Development and Commerce
- The Puerto Rico Department of Labor and Human Resources
- The Puerto Rico Department of the Treasury
- The Puerto Rico Electric Power Authority
- The Puerto Rico Industrial Development Company
- The Puerto Rico Institute of Statistics
- The Puerto Rico Planning Board



US

- Bureau of Economic Statistics
- Bureau of Labor Statistics
- US Census Bureau

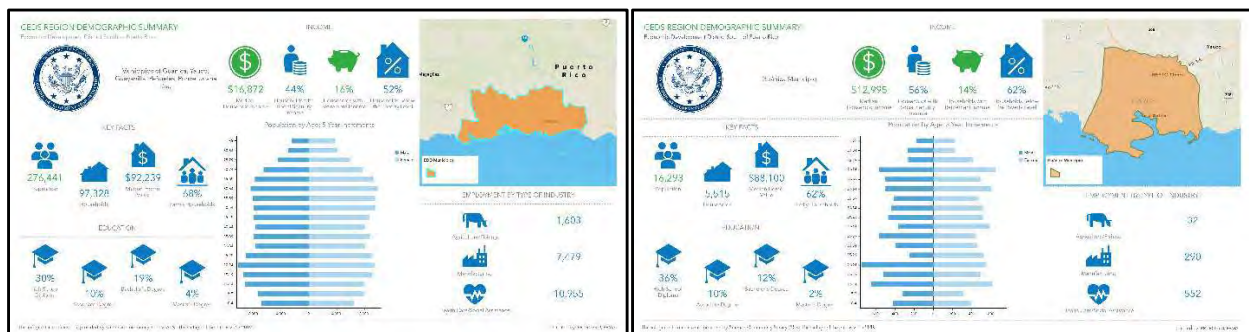
SPREDD does not intend to merely track progress on achieving goals and initiatives set forth in this CEDS. Instead, SPREDD will track underlying economic metrics to determine if the implementation of these goals is having an impact. If the metrics do not improve, then the initiatives may have to be adjusted accordingly. Rather than track numerous goals, SPREDD is going to track the following macro goals at the regional level to foster an enhanced sense of regionalism. Table 9 reflects the initial target metrics for SPREDD’s Validation Framework.

	2021	2022	2023	2024	2025	2030
Outmigration	(2,650)	(2,000)	(1,800)	(1,000)	-	-
Poverty Rate	52.6%	47.3%	42.6%	38.3%	34.5%	20.4%
Labor Force Participation	36.9%	38.4%	39.9%	41.5%	43.2%	52.5%
Jobs	61,923	64,400	66,976	69,655	72,441	88,136
Per Capita Income	10,335	11,162	12,055	13,019	14,061	20,660
% Increase in GDB-EAI (Region)	0%	4%	4%	4%	4%	4%

Table 9: Initial metrics for CEDS validation

The target metrics are intended to capture a large portion of the regional economy based on outcomes that are important to stakeholders such as reducing outmigration and poverty and increasing jobs and though effective workforce development. The primary driver of the metric is 4% annual increases in GDB-EAI (for the region), which tracks closely to GDP. Similar 4% annual increases are expected in labor force participation and job growth. The most ambitious goals are a 10% annual reduction in the poverty rate, and an 8% annual increase in per capita income.

Additionally, SPREDD intends to track a combination of economic and socioeconomic indicators (traditional and non-traditional) for each of the six municipalities for the purpose of identifying how the implementation of the CEDS goals affects the quality of life of the people of the SPREDD region.



Figures 2 and 3: Infographics with key economic and socioeconomic indicators for the SPREDD and Municipality of Guánica.

This information will be preliminarily available on the [www.eddpr.org](http://www.eddpr.org) and then will be a key component of a future digital CEDS. The gathered data will serve as a single point of reference for stakeholders, organizations, the people living and working in the south, and anyone interested in the long-term development of the region or interested in conducting business there.