

Coordinated Public Transit – Human Services Transportation Plan

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**Puerto Rico Highways and Transportation
Authority**



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EXECUTIVE SUMMARY

Executive Summary

Background and Plan Purpose

The PRHTA is the direct recipient for the Section 5310: Enhanced Mobility of Seniors and Individuals with Disabilities Program funds and its responsible for the planning and programming of projects related to the 5310 Program. Puerto Rico Highway and Transportation Authority (PRHTA), has developed a Coordinated Public Transit-Human Services Transportation Plan (CPT-HSTP), for all its Urbanized Areas under the Metropolitan Planning Organization. The Plan was developed to comply with the Moving Ahead for Progress in the 21st Century (MAP-21), and the adopted Fixing America's Surface Transportation Act (FAST) Act.

Study Area

In accordance with the 2000 and 2010 Census of Population, there are two urbanized area with population over 200,000- also known as Transportation Management Area (TMA)- San Juan and Aguadilla urbanized areas, and nine consolidated urbanized areas with population of 50,000 to 199,999 (under 200,000 population). The three (3) UZAs considered under the Puerto Rico MPO are the San Juan Urbanized Area (SJUA), Aguadilla Urbanized Area (AUA) and Urbanized Areas under 200,000 population.

Transportation Service Providers

Within the Urbanized and Non-Urbanized Areas, there are different types of service providers: public, private and non-profit entities. All of these service providers, all help to guarantee the mobility of seniors, people with disabilities and low-income individuals. Coordination between the transit providers and interested stakeholders is important to achieve a reliable and efficient transportation system.

Transportation Needs

Puerto Rico has a total population of 3,468,963, according to the 2017 American Community Survey 5-year Estimates of the Census Bureau. A significant amount of the Island population presents a transportation disadvantage (advance aged persons, persons with a disability, and persons with low-income).

The service gaps and unmet needs identified for the study area of Puerto Rico are outlined in the [Table 1](#). The table indicates the different service gaps and unmet needs grouped in the following categories: Service Accessibility and Provision, Service Quality, Transit Related Improvements, Information and Awareness, Operation, Administration and Coordination. The transportation gaps and needs were identified through a public participation process.

Table 1: Transportation Service Gaps and Unmet Needs in the Study Area

CATEGORY	GAP AND UNMET NEEDS
Service Accessibility and Provision	Lack of transit services to rural areas and intraregional trips
	Increased number of buses with ADA compliance
	Technological improvements to enhance provided services
	Smaller vehicles for easy access to narrow streets and destinations with difficult accessibility
Service Quality	Need of training to the staff providing direct services
	Vehicles including safety features and satisfactory condition
	Lack of reliability in provided services related with on time schedules
Transit Related Improvements	Lack of urban furniture and infrastructure that provides connectivity with transit systems
	Existence of architectural barriers that restraint mobility
Information and Awareness	Lack of information and awareness of available funding opportunities and eligibility
	Need of technology tools such as webpages and applications to promote transit services
Operation, Administration and Coordination	Lack of coordination between private and public providers
	Program management capacity
	Lack of coordination and service integration between different agencies

Prioritization of Service Gaps and Needs

To identify the needs and gaps in provided services a survey was distributed among the corresponding agencies, municipalities and nonprofit entities. Through this instrument it was possible to analyze the unmet needs for transportation services to disadvantage populations.

Strategies for Meeting Identified Needs

To properly address the identified gaps and needs, key recommendations and guidelines were developed. These strategies should complement programmed projects in the short and long term.

Service Accessibility and Provision

- Analyze actual service areas to identify new routes, destinations and demand – offer patterns.
- Explore and provide guidance in the acquisition of buses and vehicles with technology features and easy accessibility.

Service Quality

- Implementation of trainings for staff to improve provided services.
- Explore variables that affects safety and reliability on transit services.

Transit Related Improvements

- Identification of available funds and plans to enhance and implement accessibility through transit related improvements.

Information and Awareness

- Public education campaigns.
- Workshops to promote the availability of program funds to implement.

Operation, Administration and Coordination

- Establish a multisectoral committee that will provide guidance and coordination between transit initiatives.
- Establish a Committee for Coordination between public and private providers at different scales.
- Training and workshops to enhance Program Management Capacity.

INTRODUCTION

Introduction

The Puerto Rico Highway and Transportation Authority (PRHTA), has developed a Coordinated Public Transit-Human Services Transportation Plan (CPT-HSTP), for all its Urbanized Areas under the Metropolitan Planning Organization. The PRHTA is the direct recipient for the Section 5310: Enhanced Mobility of Seniors and Individuals with Disabilities Program funds and its responsible for the planning and programming of projects related to the 5310 Program. PRHTA responsibilities also include a fair and equitable distribution of funds, adhering to federal and state program guidelines, notifying eligible applicants about the availability of the program developing program criteria, soliciting applications, and monitoring and improving coordination of public transportation services at the local and state levels.

PRHTA will certify eligibility of applicants by:

- review applications,
- select applications for approval,
- apply for and receive funding,
- execute contracts,
- monitor grants,
- ensure that audits are performed,
- close out projects.

PRHTA will also provide appropriate technical assistance to all sub recipients.

This Plan was developed through a process that includes representatives of public and private and non-profit transportation and human services, transportation providers and participation by different sectors. PRHTA conducted surveys with diverse group of stakeholders, as an instrument to evaluate the current transportation services, the transportation needs for individuals with disabilities, older adults and low incomes, and the strategies, activities and/or projects to address the identifies gaps between current services and needs.

FTA Programs

Section 5310:

The Section 5310 program goal is to improve mobility for seniors and individuals with disabilities expanding transportation mobility options and remove any barriers that limit the transportation services. Eligible projects include both “traditional” capital investment and “nontraditional” investment beyond the Americans with Disabilities Act (ADA) complementary paratransit services.

Eligible Activities:

According to Circular **FTA C 9070.1G**, Traditional Section 5310 project examples include:

- buses and vans
- wheelchair lifts, ramps, and securement devices
- transit-related information technology systems, including scheduling/routing/one-call systems
- mobility management programs
- acquisition of transportation services under a contract, lease, or other arrangement

Nontraditional Section 5310 project examples include:

- travel training
- volunteer driver programs
- building an accessible path to a bus stop, including curb-cuts, sidewalks, accessible pedestrian signals or other accessible features
- improving signage, or way-finding technology
- incremental cost of providing same day service or door-to-door service
- purchasing vehicles to support new accessible taxi, rides sharing and/or vanpooling programs
- mobility management programs

Section 5307

Since JARC was repealed and included under Section 5307 (49 U.S.C. 5307), eligible projects can consist of:

- Planning, engineering, design and evaluation of transit projects and other technical transportation-related studies.
- Capital investments in bus and bus-related activities such as replacement, overhaul and rebuilding of buses.
- Crime prevention and security equipment and construction of maintenance and passenger facilities.
- Capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software.
- Associated transit improvements and certain expenses associated with mobility management programs are eligible.

In the Human Coordinated Plan of 2015 developed by PRHTA, the Job Access and Reverse Commute Program (JARC, Section 5316) and the New Freedom (Section 5317) were part of the FTA Programs that served to elderly, people with disabilities and low-income communities. Since then, both programs were repealed under the Fixing America's Surface Transportation Act (FAST) Act. For Section 5316, projects must be eligible under Section 5307 Urbanized Area Formula Grants and the Formula Grants for Rural Areas (Section 5311). For Section 5317, projects must be eligible under Section 5310.

Plan Purpose

The CPT-HSTP of the PRHTA was developed to comply with the Moving Ahead for Progress in the 21st Century (MAP-21), and the adopted Fixing America's Surface Transportation Act (FAST). Under the FAST Act, it is required that all projects for Section 5310, must be included in a "locally developed, coordinated public transit-human services transportation plan". This plan should include "developed through a process that includes representatives of public, private, and nonprofit transportation and human services providers and participation by the public".

The CPT-HSTP will allow for a better transportation system for disadvantage population: elderly people, people with disabilities and persons with low-income. The plan will help to prioritize and program projects directed to the aforementioned populations, in the PRHTA planning and programming documents such as the Long-Range Transportation Plan (LRTP), Statewide Transportation Improvement Program (STIP), Unified Planning Work Programs (UPWP), among other planning documents of the Agency.

Study Area

In Puerto Rico, there is one MPO, although according to the 2000 and 2010 Census of Population, there are two (2) urbanized area with population over 200,000- also known as Transportation Management Area (TMA)- San Juan and Aguadilla urbanized areas, and nine consolidated urbanized areas with population of 50,000 to 199,999 (under 200,000 population). The three (3) UZAs considered under the MPO are the San Juan Urbanized Area (SJUA), Aguadilla Urbanized Area (AUA) and Urbanized Areas under 200,000 population (UZA).

The SJUA is comprised by thirty-eight (38) Municipalities:

Aguas Buenas	Aibonito
Barranquitas	Bayamón
Caguas	Canóvanas
Carolina	Cataño
Cayey	Ciales
Cidra	Coamo*
Comerio*	Corozal
Dorado	Guaynabo
Gurabo	Humacao
Juncos	Las Piedras
Loíza	Manatí*
Maunabo	Morovis
Naguabo*	Naranjito
Orocovis*	Patillas*
Rio Grande	Salinas*
San Juan	San Lorenzo
Toa Alta	Toa Baja
Trujillo Alto	Vega Alta
Vega Baja	Yabucoa

The AUA is comprised of eleven (11) Municipalities:

Aguada	Aguadilla
Añasco*	Camuy*
Isabela	Lares
Las Marias	Moca
Sn Sebastián	Rincón
Utua do*	

The Urbanized Areas Under 200,000 population (UZA) is comprised of twenty-eight (28) municipalities:

Arecibo	Camuy	Hatillo
Quebradillas	Ceiba	Fajardo
Luquillo	Naguabo	Florida
Barceloneta	Manatí	Arroyo
Guayama	Patillas	Salinas
Juana Díaz	Villalba	Añasco
Hormigueros	Mayaguez	Ponce
Cabo Rojo	Lajas	Sabana Grande
Guánica	Guayanilla	Peñuelas
Yauco	San Germán	

Also, there are six (6) non-urbanized municipalities, according to the Census 2010:

Adjuntas	Maricao
Culebra	Santa Isabel
Jayuya	Vieques
Coamo*	Comerío*
Utuado*	Orocovis*
Patillas*	

*These Municipalities belong to more than one urbanized area, that is why they can request funds for each of these areas from the corresponding federal allocation.

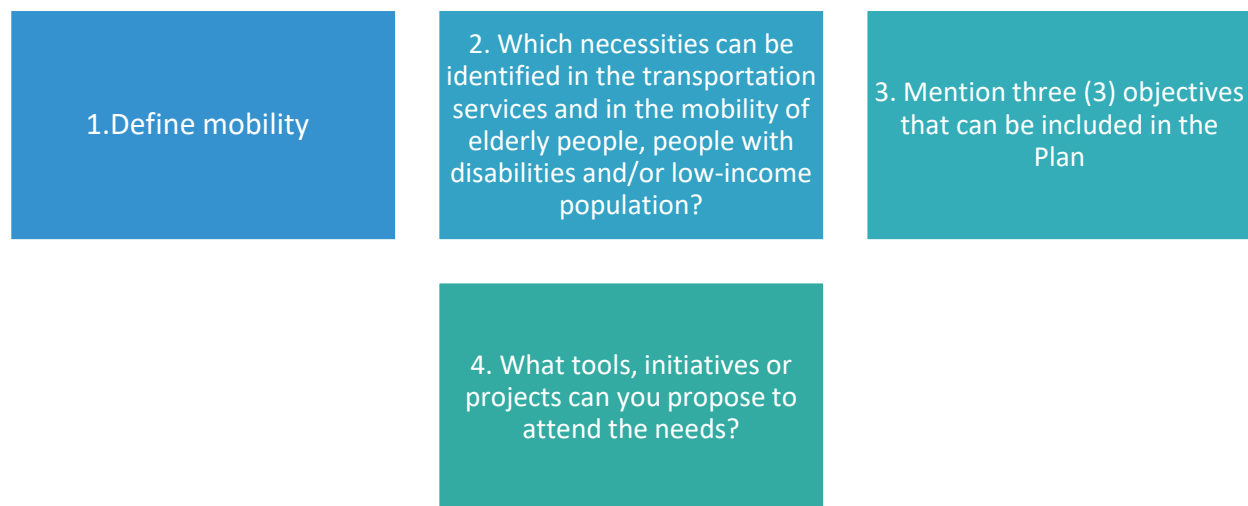
Plan Development Process

The methodology for the development process for the CPT-HSTP was done by a series of surveys and interviews to the interested stakeholders. The survey was shared via e-mail to all the Municipalities and non-profit entities and the interviews were conducted by telephone. All the questions were done in Spanish to facilitate the communication between PRHTA and the stakeholders. PRHTA also reviewed different Human Coordinated Plans from other States.

Public and stakeholder participation

For the participation of the public and the stakeholders, a survey was sent via email on December 2019 to all the Municipalities (from all the Urbanized and Non-Urbanized Areas) and Agencies that benefit from 5310 funding. A total of twenty-eight (28) Municipalities replied with their answers; also, seven (7) Non-Profit Entities and one (1) Agency.

The survey contained four (4) open questions related to mobility and transportation needs:



Peer Reviewed Documents

For this Plan, PRHTA reviewed different documents from other DOTs. The following area the reviewed Coordinated Public Transit Human Services Transportation Plans:

- 2012. *OKI Coordinated Public Transit Human Services Transportation Plan* – Ohio, Kentucky, Indiana Regional Council of Governments.
- 2016. *Coordinated Public Transit – Human Services Transportation Plan* – Memphis Urban Area Metropolitan Planning Organization.
- 2017. *Coordinated Public Transit -- Human Services Transportation Plan* – New York Metropolitan Transportation Council.
- 2018. *Statewide 5310 Locally Coordinated Plan* – Department of Transportation, Public Transportation Division, North Carolina.
- *Coordinated Public Transit – Human Services Transportation Interim Plan* – Georgia Department of Transportation, Office of Intermodal Programs.

AVAILABLE SERVICES

Available Services

Service Providers

Within the Urbanized and Non-Urbanized Areas, there are different types of service providers. All of these providers, help to guarantee the mobility of seniors, people with disabilities and low-income individuals.

Included in the [Table 2](#) below is a list of service providers under Section 5310 with their fleet status:

Table 2: 5310 Program Transit Providers

Transit Providers	Location	Urbanized Area	Fleet Status
Acción Social de PR, Inc. (Lares)	Lares	AUA	1
Acción Social Égida Los Cantares, Inc.	Bayamón	SJUA	1
Adfan -Campea (Bayamón)	Bayamón	SJUA	1
Administración de Rehabilitación Vocacional (Región Centro - Este)	Caguas	SJUA	1
Administración de Rehabilitación Vocacional (Región de Bayamón)	Bayamón	SJUA	1
Administración de Rehabilitación Vocacional (Región de Caguas)	Caguas	SJUA	3
Administración de Rehabilitación Vocacional (Región de Mayagüez)	Mayagüez	UZA	1
Administración de Rehabilitación Vocacional (Región de Ponce)	Ponce	UZA	1
Administración de Rehabilitación Vocacional (Región de San Juan)	San Juan	SJUA	1
Asociación Mayagüezana de Personas con Impedimentos, Inc.	Mayagüez	UZA	1
Asociación Benéfica de Ponce, Inc.	Ponce	UZA	2
Asociación Comunitaria Palmarejo II, Inc.	Lajas	UZA	1
Casa Matilde Nielsen, Inc.	Cayey	SJUA	1
Centro Club de Oro, Inc.	Caguas	SJUA	3
Centro Cultural de Servicios Cantero, Inc.	San Juan	SJUA	1
Centro de Ayuda y Terapia a Niños con Impedimentos, Inc. (Ayani)	Moca	AUA	1
Centro de Cuidado Diurno para Envejecientes Ave. Hostos, Inc.	Ponce	UZA	1
Centro de Desarrollo Educativo y Deportivo, Inc.	Moca	AUA	1
Centro Geriátrico La Milagrosa, Inc.	Mayagüez	UZA	1
Centro Pro-Vida Independiente, Inc.	Ponce	UZA	1
Centro Providencia Loíza, Inc.	Loíza	SJUA	1
Centro Ramón Frade, Inc.	Cayey	SJUA	2
Comité de Gericultura de Guayama, Inc.	Guayama	UZA	
COSSMA, Inc.	Las Piedras, Yabucoa	SJUA	2

Departamento de la Familia (Servicios Múltiples Guayama)	Guayama	UZA	1
Departamento de la Familia (Servicios Múltiples Juana Díaz)	Juana Diaz	UZA	1
Égida del Policía, Inc.	Guaynabo	SJUA	1
Esperanza para la Vejez, Inc. (Llorens Torres).	San Juan	SJUA	1
Fundación Educativa Enfermería Práctica, Corp.	San Juan	SJUA	1
Fundación Modesto Gotay, Inc.	Trujillo Alto	SJUA	1
Hogar Paz de Cristo, Inc.	Ponce	UZA	1
Hogar San José, Inc.	Hormigueros	UZA	1
Iniciativa Comunitaria de Investigación, Inc.	San Juan	SJUA	1
Instituto Psicopedagógico de Puerto Rico, Inc.	Bayamón	SJUA	1
Movimiento para el Alcance Vida Independiente, Inc. (MAVI)	Caguas, Río Grande	SJUA	2
Municipio de Aguada		AUA	1
Municipio de Aguas Buenas		SJUA	3
Municipio de Aibonito		SJUA	3
Municipio de Añasco		AUA/SJUA	2
Municipio de Arecibo		UZA	1
Municipio de Arroyo		UZA	2
Municipio de Barceloneta		UZA	4
Municipio de Barranquitas		SJUA	2
Municipio de Bayamón		SJUA	1
Municipio de Cabo Rojo		UZA	3
Municipio de Caguas		SJUA	4
Municipio de Camuy		UZA/AUA	6
Municipio de Canóvanas		SJUA	5
Municipio de Cataño		SJUA	3
Municipio de Cayey		SJUA	1
Municipio de Ceiba		UZA	2
Municipio de Ciales		SJUA	3
Municipio de Cidra		SJUA	4
Municipio de Coamo		SJUA/RURAL	5
Municipio de Comerío		SJUA/RURAL	1
Municipio de Corozal		SJUA	4
Municipio de Fajardo		UZA	1
Municipio de Florida		UZA	3
Municipio de Guánica		UZA	5
Municipio de Guayama		UZA	4
Municipio de Guaynabo		SJUA	2
Municipio de Gurabo		SJUA	4
Municipio de Hatillo		UZA	2
Municipio de Hormigueros		UZA	5
Municipio de Humacao		SJUA	3
Municipio de Isabela		AUA	2
Municipio de Jayuya		RURAL	1
Municipio de Juncos		SJUA	1
Municipio de Lajas		UZA	3

Municipio de Lares	AUA	2	
Municipio de Las Piedras	SJUA	2	
Municipio de Luquillo	UZA	2	
Municipio de Manatí	SJUA/UZA	2	
Municipio de Maunabo	UZA	3	
Municipio de Mayagüez	UZA	2	
Municipio de Moca	AUA	3	
Municipio de Morovis	SJUA	2	
Municipio de Naranjito	SJUA	3	
Municipio de Patillas	UZA/SJUA	2	
Municipio de Ponce	UZA	6	
Municipio de Quebradillas	UZA	1	
Municipio de Rincón	AUA	1	
Municipio de Río Grande	SJUA	6	
Municipio de Sabana Grande	UZA	1	
Municipio de Salinas	SJUA/UZA	2	
Municipio de San Juan	SJUA	13	
Municipio de San Germán	UZA	3	
Municipio de San Lorenzo	UZA	2	
Municipio de San Sebastián	AUA	1	
Municipio de Santa Isabel	RURAL	1	
Municipio de Toa Alta	SJUA	2	
Municipio de Toa Baja	SJUA	4	
Municipio de Trujillo Alto	SJUA	2	
Municipio de Vega Baja	SJUA	2	
Municipio de Yabucoa	SJUA	4	
Municipio de Yauco	UZA	4	
National Church Residences	Fajardo, Guaynabo and Carolina	SJUA/UZA	3
Oficina del Procurador del Veterano (La Casa del Veterano)	Juana Díaz	UZA	1
OPAPI, inc.			1
Sociedad Americana Contra el Cáncer	San Juan	SJUA	1

Existing Levels of Coordination

Coordination between the transit providers (public, private and non-profit entities) and interested stakeholders is important to achieve a reliable and efficient transportation system. PRHTA, following the established procedures under the Public Involvement Plan (PIP), uses the MPO structure to coordinate between different sectors, such as the Policy Board Committee, Public Participation Committee and Technical Advisory Committee.

PRHTA coordinates annually under the Federal Coordination Office (OCF), the planning and programming of projects for funding for transportation systems. These efforts are focused to involve the Municipalities, Non-Profit Entities, Governmental Agencies and Private Transit Providers, in decision-making towards transit projects.

Description of the Available Services

From the Municipalities and Non-Profit Entities that participated in the interviews, the services that were described by the participants are detailed below:

Urbanized Area	Population Served	Description of Services
SJUA	Elderly, people with disabilities and low-income	Transportation services to: medical appointments, trips to purchase groceries, trips to errands, governmental offices, social and recreational activities, home to elderly center and from elderly center to home.
AUA	Elderly	Transportation to: home to elderly center and from elderly center to home, trips to medical appointments, recreational activities.

GAPS ANALYSIS AND UNMET NEEDS

GAPS ANALYSIS AND UNMET NEEDS

Transportation Disadvantaged Populations

The populations of advance aged persons, persons with a disability and persons with low-income frequently present the most difficulty accessing the transportation services. In Puerto Rico these transportation disadvantaged populations have challenges finding transportation to medical services, shopping for basic necessities, personal errands, employment, and recreational and social activities, among others. The [Table 3](#) illustrates this *Transportation Disadvantaged Populations by Urbanized Area*. Some of the causes for these challenges may be the unavailability of services in some geographic areas, insufficiency of services due to low frequency of trips, and inappropriate services that do not attend the special need of these population. In order to study and define the service gaps and unmet needs of these transportation disadvantaged populations, it is imperative to take a closer look at them.

Table 3: Transportation Disadvantaged Populations by Urbanized Area

POPULATION	SJUA	AUA	UZA	RURAL	TOTAL
Persons of 65 years or more	379,637	59,730	178,369	11,885	629,621
Persons Non-institutionalized with a Disability	457,973	69,749	186,087	13,525	727,334
Families with Income Below 150 Percent of Poverty Level	279,623	54,954	145,352	11,157	491,086

Source: Census Bureau, 2017 American Community Survey 5-year Estimates

Older Adults

A person of advanced age is an individual who is at minimum 65 years old, this as defined by the Title 49 of the United States Code. In Puerto Rico there is an estimated population of 629,621 of advanced aged persons. This represents an eighteen (18) percent of the total population of the Island. The [Table 4](#) illustrates the population of 65 years or more by urbanized area.

Table 4: Population of 65 years or more by Urbanized Area

Urbanized Area	Population	Population of 65 years or more	Percent of Population of 65 years or more (%)
SJUA	2,134,727	379,637	18
AUA	323,974	59,730	18
UZA	937,360	178,369	19
RURAL	72,902	11,885	16
TOTAL	3,468,963	629,621	18

Source: Census Bureau, 2017 American Community Survey 5-year Estimates

The urbanized area with the highest population of advanced age is San Juan (SJUA). In which the Municipalities of Bayamón, Guaynabo, Maunabo, Carolina and San Juan represent the areas with the biggest percent of advanced age population, with a twenty (20) percent each one, see [Appendix A](#).

Persons with Disabilities

The Bill of Rights of Persons with Disabilities, Act 238-PR of 2004, states that a person with disabilities is all person that has a physical, mental or sensory impairment that limits one or more essential activities of his or her life; has a history or record of a physical, mental or sensory impairment; or who is considered by others to have a physical, mental or sensorial impairment. There is an estimated population of 727,334 individuals with disabilities in the study area of Puerto Rico, which represents a 21 percent of the total population of the Island. The [Table 5](#) reflects the population with disabilities by Urbanized Area, that is not institutionalized. The urbanized area with the highest population of persons with disabilities is San Juan (SJUA). In which the Municipality of Orocovis represent the area with the biggest percent of persons with disabilities, with a thirty-four (34) percent, see [Appendix A](#).

Table 5: Population with Disabilities by Urbanized Area

Urbanized Area	Population	Population Non-institutionalized with a Disability	Percent of Population Non-institutionalized with a Disability
SJUA	2,134,727	457,973	21
AUA	323,974	69,749	22
UZA	937,360	186,087	20
RURAL	72,902	13,525	19
TOTAL	3,468,963	727,334	21

Source: Census Bureau, 2017 American Community Survey 5-year Estimates

Persons with Low Income

Title 42 of the United States Code states that an individual is considered to have low-income if his or her family income is at or below 150 percent of the poverty line. In the study area of Puerto Rico there is an estimated population of 491,086 of persons with low-income. This represents a fifty-eight (58) percent of the total of families in the Island. The [Table 6](#) illustrates the total of families with income below 150 percent of poverty level by Urbanized Area.

Table 6: Families with Income Below 150 Percent of Poverty Level by Urbanized Area

Urbanized Area	Number of Families	Families with Income Below 150 Percent of Poverty Level	Percent of Families with Income Below 150 Percent of Poverty Level
SJUA	525,848	279,623	53
AUA	82,374	54,954	67
UZA	225,861	145,352	64
RURAL	16,582	11,157	67
TOTAL	850,665	491,086	58

Source: Census Bureau, 2017 American Community Survey 5-year Estimates

The urbanized area with the highest population with persons with low-income is San Juan (SJUA). In which the Municipality of Ciales represents the area with the biggest percent of persons with low-income, with a twenty (19) percent, see [Appendix A](#).

Availability of a Vehicle

Another indicator that illustrates the necessity of the population of Puerto Rico for transportation services is the number of persons that don't have a vehicle available to attend their basic necessities. In Puerto Rico there is a total of 204,742 households that don't have a vehicle available. This means that a total of sixteen (16) percent of the households that are occupied in Puerto Rico don't have a private vehicle. The [Table 7](#) presents the total of households with no vehicle available by Urbanized Area.

Table 7: Households with No Vehicle Available by Urbanized Area

Urbanized Area	Number of Households	Households with No Vehicle Available	Percent of Households with No Vehicle Available
SJUA	772,448	126,182	16
AUA	117,362	18,130	15
UZA	333,835	56,060	17
RURAL	26,278	4,370	17
TOTAL	1,249,923	204,742	16

Source: Census Bureau, 2017 American Community Survey 5-year Estimates

The urbanized area with the highest population with persons with low-income is San Juan (SJUA). In which the Municipalities of Cataño and San Juan represent the areas with the biggest percent of persons with low-income, with a ten (10) percent each one, see [Appendix A](#).

Service Gaps and Unmet Needs

To properly identify the needs and gaps in the provided services, a survey was distributed among the agencies, municipalities and nonprofit entities. Through this instrument it was possible to analyze the unmet needs for transportation services to disadvantage population. An explanation of each of the categories is included in [Table 1](#).

Table 1: Identified Gaps and Unmet Needs by Categories

Category	Gap and Unmet Needs
Service Accessibility and Provision	Lack of transit services to rural areas and intraregional trips.
	Increased number of buses with ADA compliance
	Technological improvements to enhance provided services
	Smaller vehicles for easy access to narrow streets and destinations with difficult accessibility
Service Quality	Need of training to the staff providing direct services
	Vehicles including safety features and satisfactory condition
	Lack of reliability in provided services related with on time schedules
Transit Related Improvements	Lack of urban furniture and infrastructure that provides connectivity with transit systems
	Existence of architectural barriers that restraint mobility
Information and Awareness	Lack of information and awareness of available funding opportunities and eligibility
	Need of technology tools such as webpages and applications to promote transit services
Operation, Administration and Coordination	Lack of coordination between private and public providers
	Program management capacity
	Lack of coordination and service integration between different agencies

Provision and Accessibility

- **Lack of transit services to rural areas and intraregional trip-** The provision of transit services covering the rural areas was identified as an unmet need, as well as the necessity to amplify the availability regional the trips that transcends the borders of the municipalities or usual area of coverage. As well as the diversification of the destinations- buying groceries, recreational activities, medical appointments, among others.
- **Increased number of buses with ADA compliance-** There is a need of additional buses in compliance with ADA specifications to expand the provision of services.
- **Technological improvements to enhance provided services-** The lack of accessibility to schedule, coordinate and manage services through technological means, compromises the efficiency of the provided services.
- **Smaller vehicles for easy access to narrow streets and destinations with difficult accessibility-** The limitation of geographic accessibility because of topography is a challenge to the provision of transit services. In some occasions, the actual size specifications of the buses are much larger and limits the provided services.

Service Quality

- **Need of training to the staff providing direct services-** Adequate services to users of the transit systems is necessary, providing training to staff related client service.
- **Vehicles including safety features and satisfactory condition-** Assurance of safety and security in provided services through specifications and proper maintenance of the vehicles.
- **Lack of reliability in provided services related with on time schedules-** Nonconsistency in the provision of trips and untimely schedule affects the services provided to disadvantage population.

Transit related improvements

- **Lack of urban furniture and infrastructure that provides connectivity with transit systems-** Absence or deterioration of equipment and infrastructure that promotes access and connection to elderly population, disabilities or low-income groups, such a as sidewalks, crosswalks, bus shelters, bus stops, etc. There is a presence of architectural barriers that restraint mobility and access to transit services.

Information and Awareness

- **Lack of information and awareness of available funding opportunities and eligibility-** The lack of knowledge and awareness related to availability of funds - and how to access them- to cover the special needs of low income, people with disability and elderly population such as operational assistance, technology support, voucher programs, taxi services, maintenance of vehicles, among others. A gap of information in the eligible services that providers can offer to users it is also a gap.
- **Need of technology tools such as webpages and applications to promote availability of services-** There is a need to promote available transit services in multiple media such as webpages and applications or other traditional media such as newspapers or radio.
- **Assessments** - Lack of information regarding assessments and evaluation of services.

Operation, Administration and Coordination

- **Lack of coordination between private and public providers-** Public providers such as municipalities and entities within, and private providers as nonprofit organizations or private corporations need to coordinate their transit services to provide a better service.
- **Program management capacity-** There is an unmet need to reinforce the management skills of service providers to maximize the use of funds and available resources.
- **Lack of coordination and service integration between different agencies-** There are multiple entities state agencies, municipalities and nonprofit organizations that provide different services to low income, people with disability and elderly population. It is an unmet need ongoing the coordination and integration of services providers, to maximize the provided services to user and identify collaborations and policy projects.

Prioritization of Service Gaps and Needs

To properly identify the needs and gaps in the provided services, a survey was distributed among the agencies, municipalities and nonprofit entities. Through this instrument it was possible to analyze the unmet needs for transportation services to disadvantage populations. An explanation of each of the categories is presented in the following [Table 9](#).

Table 9: Gaps and Unmet Needs Analysis

Category	Gaps and Unmet Needs	Urbanized Area				
		All	SJUA	AUA	UZA	NU
Service Accessibility and Provision	Lack of transit services to rural areas and intraregional trips.	34%	39%	21%	23%	30%
	Increased number of buses with ADA compliance					
	Technological improvements to enhance provided services					
	Smaller vehicles for easy access to narrow streets and destinations with difficult accessibility					
Service Quality	Need of training to the staff providing direct services	8%	8%	7%	8%	10%
	Vehicles including safety features and satisfactory condition					
	Lack of reliability in provided services related with on time schedules					
Transit related improvements	Lack of urban furniture and infrastructure that provides connectivity with transit systems	9%	5%	14%	15%	20%
	Existence of architectural barriers that restraint mobility					
Information and Awareness	Lack of information and awareness of available funding opportunities and eligibility	15%	15%	36%	8%	0%
	Need of technology tools such as webpages and applications to promote transit services					
Operation, Administration and Coordination	Lack of coordination between private and public providers	30%	29%	21%	46%	30%
	Program management capacity					
	Lack of coordination and service integration between different agencies					

STRATEGIES AND ACTIVITIES

Strategies and Activities

Strategies for Meeting Identified Needs

To properly address the identified gaps and needs, key recommendations and guidelines were developed. These strategies should complement programmed projects in the short and long term. The following is a discussion of some strategies to be implemented and assist in the promotion of specific projects.

Service Accessibility and Provision

- Analyze actual service areas to identify new routes, destinations and demand – offer patterns.
- Explore and provide guidance in the acquisition of buses and vehicles with technology features and easy accessibility.

Service Quality

- Implementation of trainings for staff to improve provided services.
- Explore variables that affects safety and reliability on transit services.

Transit Related Improvements

- Identification of available funds and plans to enhance and implement accessibility through transit related improvements.

Information and Awareness

- Public education campaigns.
- Workshops to promote the availability of program funds to implement.

Operation, Administration and Coordination

- Establish a multisectoral committee that will provide guidance and coordination between transit initiatives.
- Establish a Committee for Coordination between public and private providers at different scales.
- Training and workshops to enhance Program Management Capacity.

Short- term Strategies and Activities

- **Explore and provide guidance in the acquisition of buses and vehicles with technology features and easy accessibility**

Service providers have mentioned the obstacles in accessing rural places and narrow streets in urban spaces because of the dimensions and specifications of the buses. The provision of guidance to acquire vehicle and buses with smaller dimensions, that are in compliance with FTA funding requirements would be implemented. It would be encouraged the inclusion of technology features such as Global Positioning Systems (GPS) and Geographic Information Systems (GIS) to the transit systems.
- **Implementation of trainings for staff to improve provided services**

To enhance the quality of provided transit services is key to implement a series of trainings related to client service for staff working with elderly population, people with disability and low-income groups. A standard handbook could be created to provide training, complemented with on-site trainings.
- **Public educational campaigns**

To promote awareness and participation in available services is would be necessary to launch educational campaigns encouraging providers and users to participate in different services.
- **Workshops to promote the availability of program funds to implement transit services**

To promote the knowledge and access to FTA Section 5310 funds it would be required to reinforce efforts of promotion by implementing workshops to interested parties.
- **Training and workshops to enhance Program Management Capacity**

It would be necessary to implement training and workshops for Program Managers to have a better understanding of the requirements to apply for funds and comply with all related federal and state regulations.

Long- term Strategies and Activities

- **Analyze actual service areas to identify new routes, destinations and demand – offer patterns.**
To analyze and evaluate the current services, projects related to transportation studies must be incorporated in the planning and programming documents of the MPO. The results of the planning studies will provide and recommend routes, evaluate the demands of the population and determine the actual patterns of the users.
- **Explore variables that affects safety and reliability on transit services**
The provision of reliable services with on time schedules and vehicles in good maintenance would enhance services. The analysis of variables that affects service reliability would need to be performed as well as the implementation of projects and technology to keep up with trip schedule and maintenance of vehicles.
- **Identification of available funds and plans to enhance and implement accessibility through transit related improvements-**
To identify funding for the accessibility and mobility of the users, every Fiscal Year, FTA publishes its annual apportionments, which includes Section 5310 funding. Also, under FTA, there are discretionary funding, like *Access and Mobility Partnership Grants* in which projects related to those services compete for funds or *Human Services Coordination Research (HSCR) Grants*, that its funding will support the implementation of innovative strategies towards the transportation services.
- **Establish a multisectoral committee that will provide guidance and coordination between transit initiatives**
To formally establish coordination between the service providers (public, private or non-profit), PRHTA shall serve as a liaison between the interested stakeholders. An example would be creating a committee to be a part of the MPO or Technical Committees, in the programming process.
- **Establish a Committee for Coordination between public and private providers at different scales**
Following the same steps to create a multisectoral committee, PRHTA will bring guidance and coordination to the stakeholders. The efforts could be divided locally, such as communities within a Municipality, or as a regional effort, that would include various Municipalities or organizations.

Other projects whose efforts are not included in the long-term or short-term strategies presented in this plan, could be evaluated and/or considered, in the case that there is available funding and the projects comply with the established requirements.

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APPENDICES

Appendix A: Demographic Data by Municipality

Municipality	Urbanized Area	Total Population	Total Population of 65 years or more	Percent of Population of 65 years or more	Total Population Non-institutionalized with a Disability	Percent of Population Non-institutionalized with a Disability	Number of Households	Total of Households with No Vehicle Available	Percent of Households with No Vehicle Available	Number of Families	Families with Income Below 150 Percent of Poverty Level	Percent of Families with Income Below 150 Percent of Poverty Level
Puerto Rico	ALL	3,468,963	629,621	18	734,789	21.18	1,222,606	204,742	6	850,665	491,086	14.16
Adjuntas	RURAL	18,525	3,141	17	3,938	21.26	6,166	1,172	6.33	4,428	3,318	17.91
Aguada	AUA	39,470	6,449	16	3,938	9.98	12,824	1,808	4.58	9,507	6,241	15.81
Aguadilla	AUA	55,722	10,788	19	12,645	22.69	21,322	3,943	7.08	14,953	9,477	17.01
Aguas Buenas	SJUA	26,855	4,618	17	7,523	28	8,594	1,576	6	6,285	4,093	15
Aibonito	SJUA	24,008	4,330	18	6,402	27	8,573	1,360	6	6,380	3,855	16
Añasco	AUA	27,892	5,122	18	7,415	26.58	9,255	1,230	4.41	6,644	4,125	14.79
Arecibo	UZA	89,550	17,630	20	17,194	19.20	32,308	5,820	6.50	22,704	14,043	15.68
Arroyo	UZA	18,504	3,179	17	4,594	24.83	6,127	1,027	5.55	4,451	3,238	17.50
Barceloneta	UZA	24,583	4,312	18	5,727	23.30	8,090	1,171	4.76	5,921	3,909	15.90
Barranquitas	SJUA	29,237	4,015	14	7,573	26	9,109	1,316	5	6,958	5,039	17
Bayamón	SJUA	188,614	37,017	20	47,862	25	69,318	9,409	5	48,914	23,796	13
Cabo Rojo	UZA	49,726	10,476	21	7,797	15.68	16,495	2,345	4.72	11,106	7,201	14.48
Caguas	SJUA	134,269	24,386	18	31,060	23	49,386	7,960	6	34,734	17,300	13
Camuy	UZA	32,936	5,823	18	7,134	21.66	11,571	1,320	4.01	8,741	5,547	16.84
Canóvanas	SJUA	46,779	7,099	15	8,935	19	14,603	1,981	4	10,850	6,177	13
Carolina	SJUA	161,684	32,426	20	37,008	23	64,056	8,786	5	43,449	18,897	12
Cataño	SJUA	25,595	4,356	17	5,757	22	9,068	2,496	10	6,604	3,864	15
Cayey	SJUA	45,431	8,313	18	14,169	31	16,495	2,933	6	11,668	6,754	15
Ceiba	UZA	12,238	2,590	21	1,242	10.15	4,532	711	5.81	3,117	1,966	16.06
Ciales	SJUA	17,325	3,014	17	4,239	24	5,949	1,094	6	4,358	3,206	19
Cidra	SJUA	41,181	6,278	15	11,662	28	12,998	1,956	5	9,837	5,758	14
Coamo	SJUA	39,796	6,302	16	9,749	24	13,783	2,108	5	9,751	5,942	15

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Municipality	Urbanized Area	Total Population	Total Population of 65 years or more	Percent of Population of 65 years or more	Total Population Non-institutionalized with a Disability	Percent of Population Non-institutionalized with a Disability	Number of Households	Total of Households with No Vehicle Available	Percent of Households with No Vehicle Available	Number of Families	Families with Income Below 150 Percent of Poverty Level	Percent of Families with Income Below 150 Percent of Poverty Level
Comerio	SJUA	19,914	3,188	16	5,978	30	6,075	1,403	7	4,329	3,258	16
Corozal	SJUA	34,933	5,573	16	7,644	22	11,026	1,668	5	8,781	6,097	17
Culebra	RURAL	1,494	305	20	105	7.03	520	117	7.83	291	163	10.91
Dorado	SJUA	37,722	5,884	16	5,516	15	12,029	1,171	3	9,276	4,187	11
Fajardo	UZA	33,075	6,679	20	7,523	22.75	12,436	1,944	5.88	8,461	5,096	15.41
Florida	UZA	12,140	1,962	16	2,279	18.77	4,300	448	3.69	3,323	2,351	19.37
Guánica	UZA	17,327	3,678	21	5,926	34.20	5,528	1,025	5.92	3,697	2,835	16.36
Guayama	UZA	42,623	6,815	16	9,907	23.24	14,989	3,072	7.21	9,852	6,604	15.49
Guayanilla	UZA	19,578	3,584	18	3,090	15.78	6,575	918	4.69	4,702	3,190	16.29
Guaynabo	SJUA	90,773	17,876	20	18,583	20	32,913	3,613	4	21,859	7,781	9
Gurabo	SJUA	47,074	6,658	14	10,766	23	15,223	1,871	4	11,286	4,500	10
Hatillo	UZA	40,978	7,365	18	3,374	8.23	14,443	1,915	4.67	10,466	6,155	15.02
Hormigueros	UZA	16,474	4,157	25	4,893	29.70	6,271	1,011	6.14	4,172	2,391	14.51
Humacao	SJUA	54,736	10,417	19	5,718	10	18,378	2,418	4	13,034	7,660	14
Isabela	AUA	43,314	7,828	18	11,556	26.68	15,230	2,111	4.87	11,100	7,426	17.14
Jayuya	RURAL	15,297	2,244	15	3,450	22.55	4,818	956	6.25	3,700	2,654	17.35
Juana Díaz	UZA	47,952	7,477	16	9,866	20.57	15,964	2,220	4.63	12,040	7,357	15.34
Juncos	SJUA	39,704	5,726	14	8,845	22	12,627	1,855	5	8,958	5,860	15
Lajas	UZA	23,893	5,210	22	4,678	19.58	8,059	981	4.11	5,620	4,266	17.85
Lares	AUA	27,321	5,051	18	5,440	19.91	10,051	1,656	6.06	7,447	5,269	19.29
Las Marías	AUA	8,874	1,610	18	661	7.45	3,033	491	5.53	2,195	1,379	15.54
Las Piedras	SJUA	38,253	5,995	16	5,209	14	12,534	1,366	4	9,504	5,740	15
Loíza	SJUA	27,242	4,060	15	5,413	20	8,919	2,154	8	6,505	4,340	16

Appendix A: Demographic Data by Municipality

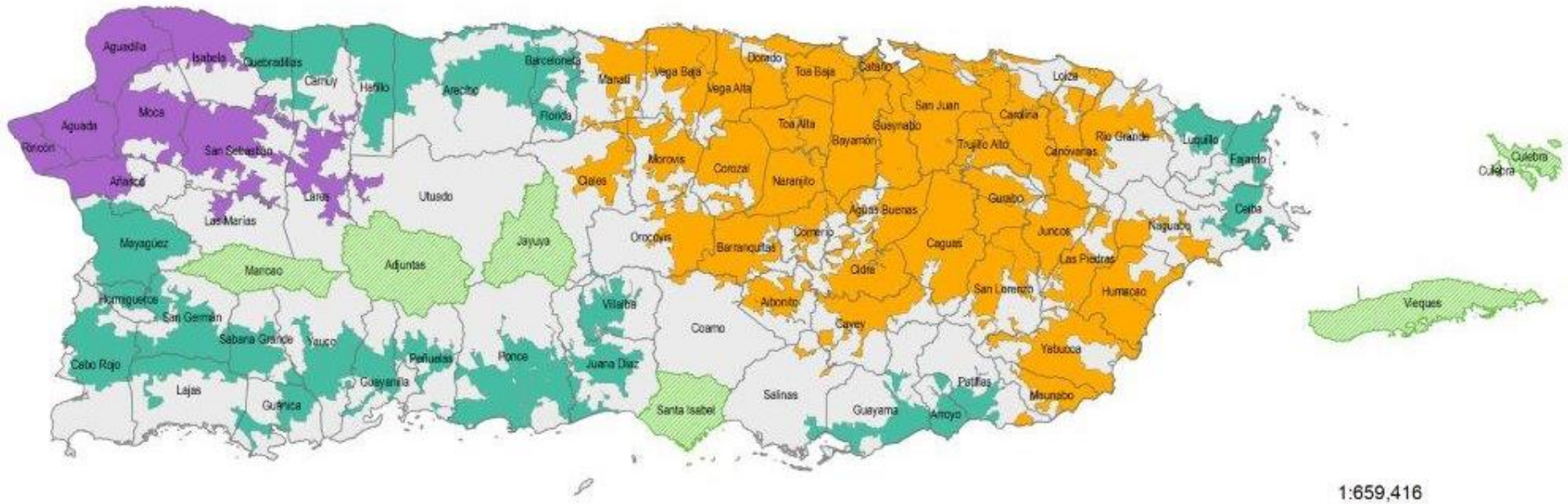
Municipality	Urbanized Area	Total Population	Total Population of 65 years or more	Percent of Population of 65 years or more	Total Population Non-institutionalized with a Disability	Percent of Population Non-institutionalized with a Disability	Number of Households	Total of Households with No Vehicle Available	Percent of Households with No Vehicle Available	Number of Families	Families with Income Below 150 Percent of Poverty Level	Percent of Families with Income Below 150 Percent of Poverty Level
Luquillo	UZA	18,952	3,646	19	4,774	25.19	6,636	1,083	5.71	4,785	2,800	14.77
Manatí	SJUA	40,705	7,724	19	8,015	20	15,703	2,941	7	11,270	6,618	16
Maricao	RURAL	6,180	1,067	17	476	7.70	1,914	328	5.31	1,374	1,019	16.49
Maunabo	SJUA	11,297	2,227	20	1,644	15	3,976	726	6	2,762	1,766	16
Mayagüez	UZA	79,615	17,209	22	21,094	26.50	29,769	6,478	8.14	18,443	11,658	14.64
Moca	AUA	37,676	5,789	15	8,582	22.78	12,975	1,919	5.09	9,494	6,612	17.55
Morovis	SJUA	31,785	4,412	14	6,302	20	10,129	1,465	5	7,765	5,189	16
Naguabo	UZA	26,584	4,301	16	2,535	9.54	8,346	1,341	5.04	5,760	3,774	14.20
Naranjito	SJUA	29,112	4,822	17	7,786	27	8,696	1,387	5	6,520	4,182	14
Orocovis	SJUA	21,906	3,258	15	7,369	34	6,797	1,312	6	5,153	3,709	17
Patillas	UZA	17,769	3,378	19	2,309	12.99	6,501	1,225	6.89	4,090	2,737	15.40
Peñuelas	UZA	21,661	3,162	15	3,044	14.05	7,132	1,083	5.00	5,488	3,888	17.95
Ponce	UZA	148,863	28,402	19	23,852	16.02	53,341	11,144	7.49	36,710	23,522	15.80
Quebradillas	UZA	24,548	4,398	18	5,715	23.28	8,491	1,105	4.50	6,215	4,111	16.75
Rincón	AUA	14,526	3,239	22	4,500	30.98	5,079	893	6.15	3,167	1,905	13.11
Río Grande	SJUA	51,768	9,180	18	11,496	22	15,938	2,067	4	11,725	6,370	12
Sabana Grande	UZA	23,610	4,845	21	7,681	32.53	7,568	1,431	6.06	5,265	3,379	14.31
Salinas	SJUA	29,239	5,024	17	6,031	21	10,718	1,616	6	7,625	5,231	18
San Germán	UZA	32,937	7,286	22	3,644	11.06	11,922	2,344	7.12	7,762	5,037	15.29
San Juan	SJUA	355,181	72,093	20	68,194	19	145,321	36,886	10	84,529	42,608	12
San Lorenzo	SJUA	38,689	6,375	16	7,859	20	13,670	2,353	6	9,728	5,818	15
San Sebastián	AUA	38,970	8,090	21	9,745	25.01	14,278	2,387	6.13	10,674	7,655	19.64
Santa Isabel	RURAL	22,475	3,321	15	4,873	21.68	7,759	1,188	5.29	5,375	3,268	14.54

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Municipality	Urbanized Area	Total Population	Total Population of 65 years or more	Percent of Population of 65 years or more	Total Population Non-institutionalized with a Disability	Percent of Population Non-institutionalized with a Disability	Number of Households	Total of Households with No Vehicle Available	Percent of Households with No Vehicle Available	Number of Families	Families with Income Below 150 Percent of Poverty Level	Percent of Families with Income Below 150 Percent of Poverty Level
Toa Alta	SJUA	74,169	9,129	12	13,416	18	22,205	1,864	3	17,919	7,990	11
Toa Baja	SJUA	81,905	14,076	17	18,204	22	27,802	3,253	4	19,387	9,850	12
Trujillo Alto	SJUA	69,478	11,567	17	12,400	18	24,357	2,678	4	17,893	7,340	11
Utuado	AUA	30,209	5,764	19	5,267	17.44	13,315	1,692	5.60	7,193	4,865	16.10
Vega Alta	SJUA	38,589	6,288	16	6,125	16	16,090	1,982	5	9,281	5,863	15
Vega Baja	SJUA	54,754	9,795	18	12,146	22	24,648	2,971	5	12,918	7,457	14
Vieques	RURAL	8,931	1,807	20	683	7.65	5,101	609	6.82	1,414	735	8.23
Villalba	UZA	23,659	3,537	15	5,468	23.11	9,097	966	4.08	5,934	3,615	15.28
Yabucoa	SJUA	35,025	6,136	18	5,375	15	14,742	2,187	6	8,053	5,528	16
Yauco	UZA	37,585	7,268	19	10,747	28.59	17,344	1,932	5.14	7,036	4,682	12.46

Source: Census Bureau, 2017 American Community Survey 5-year Estimates

Appendix B: Map of Urbanized Areas, Non-Urbanized Areas and Rural Municipalities



Áreas Urbanizadas, Áreas No Urbanizadas y Municipios Rurales

Legenda

- Municipios Rurales
- Área Urbanizada de San Juan
- Área Urbanizada de Aguadilla
- Áreas Urbanizadas Menores de 200,000
- Áreas No Urbanizadas

