

# Imperial County Colonias

## Infrastructure and Housing Needs Assessment

### Executive Summary

**Prepared for:**

Southern California Association  
of Governments



**Project Manager:** Gwendy Silver

**Prepared by:**

Berkeley Economic Advising and Research

1442A Walnut Street, Suite 108

Berkeley, CA 94705

Tel: 510-220-4567

Email: [admin@bearecon.com](mailto:admin@bearecon.com)

Web: [www.bearecon.com](http://www.bearecon.com)



**B E A R**  
BERKELEY ECONOMIC  
ADVISING AND RESEARCH

Executive Director: David Wells Roland-Holst

(Signature): 

**Prime Contact:** Graciela Chong

**Contact E-mail:** [gchong@bearecon.com](mailto:gchong@bearecon.com)

## Table of Contents

<b>Infrastructure and Housing Needs Assessment .....</b>	<b>1</b>
<b>1 Introduction .....</b>	<b>3</b>
<b>2 Colonia Overviews .....</b>	<b>4</b>
<b>3 Colonia Demographics.....</b>	<b>10</b>
<b>4 Housing Assessment .....</b>	<b>11</b>
<b>5 Infrastructure Overview .....</b>	<b>23</b>
<b>6 Infrastructure Recommendations .....</b>	<b>29</b>

## 1 Introduction

In anticipation of substantial Federal commitments for investment in local infrastructure and housing improvements, the Southern California Association of Governments (SCAG) has commissioned an Infrastructure Needs Assessment for each Colonia in Imperial County. This assessment offers stakeholders a comprehensive and up-to-date inventory of housing and public infrastructure resources and services for each Colonia, identifying facility and service gaps that could be beneficially improved with targeted public investments.

HUD and USDA Rural Development both define Colonias as rural communities within the US-Mexico border region that lack adequate water, sewer, decent housing, or some combination of these. This definition is broader than the iconic image of a Colonia as a scattered rural homestead on inappropriately subdivided land, with housing made of salvaged materials and no utilities. The siting of Colonias is also quite diverse in jurisdictional terms - some are incorporated communities under the control of a city, while some are unincorporated under control of the county.

In Imperial County, there are 15 recognized Colonias<sup>1</sup> spread across both incorporated and unincorporated areas. In incorporated areas, there are Colonias in four cities that represent a small fraction of the city and have adequate water and sewers but typically lack sufficient housing. Colonias are often not different from other low-income or marginalized communities within the cities, but they can benefit from the HUD designation as it makes them eligible for Community Development Block Grant (CDBG) Colonias Set-Aside funding.<sup>2</sup> The Colonias located in incorporated areas are in Brawley, Calexico, El Centro, and the City of Imperial.

In unincorporated areas, the remaining 9 Colonias can largely be described as depopulating former resort communities or majority-Hispanic communities.<sup>3</sup> These communities are rural and often quite isolated. Most Colonia communities lack civic institutions such as schools or physician offices. Infrastructure is largely outdated, near capacity, or completely lacking. The housing stock is typically poor, categorized as vacant homes or houses in disrepair. Many residents live in mobile homes or RVs. The Colonias

---

<sup>1</sup> In total there are 9 Colonias in unincorporated Imperial County and 6 Colonias in 4 incorporated cities. The cities of Calexico and Imperial each contain two Colonias.

<sup>2</sup> [CDBG Colonias Set-Aside](#) - requires the border states of Arizona, California, New Mexico and Texas to set-aside a percentage of their annual state CDBG allocations. The set-aside is used in the Colonia to help provide Colonias residents with potable water, adequate sewer systems, or decent, safe, and sanitary housing. In California, this amount is 5% of the annual CDBG allocation.

<sup>3</sup> Imperial County generally is 84% Hispanic, but demographics do vary by community.

located in unincorporated areas are Bombay Beach, Heber, Niland, Ocotillo, Palo Verde, Poe, Salton Sea Beach, Seeley, and Winterhaven.

This project has developed detailed housing and infrastructure profiles for each Colonia, summarized below but in much greater spatial and other detail in other project documentation. Each profile contains information on demographics, housing, and infrastructure and provides stakeholders with necessary resources on Imperial Valley Colonias. As the profiles demonstrate, there is significant heterogeneity across Colonias. While some Colonias lack basic services and infrastructure with declining populations, others have improved conditions and are slated for potential housing growth at the county and city level.

## 2 Colonia Overviews

**Figure 1: Map of Imperial County Colonia Locations**



## 2.1 Incorporated Colonias

### ***Brawley***

Brawley is located approximately 25 miles north of the California-Mexico border. The city is connected with state routes 78, 86, and 111, and is 13 miles north of El Centro. It is the third largest in Imperial County.

Its history is rooted in agriculture—in the early 1900s, its population was minimal, around 100 people, with only railroads and early agriculture production in place. Throughout the years, the population has increased to the thousands and year-round agriculture is critical to the town's economic growth. There is a significant cattle and feed industry within Brawley. Additionally, the town also hosts a Cattle Call Rodeo where people of all ages can enjoy Rodeo competition and entertainment. The Colonia is located within the city limits of Brawley.

Brawley Colonia makes up a portion of the east central part of the city of Brawley bisected north and south by Main Street and covering a combination of residential and commercial neighborhoods. The Colonia is bordered by agricultural areas to the east and south and Brawley city center to the west.

### ***Calexico***

Calexico is situated on the California-Mexican border and is economically and culturally linked to the neighboring town of Mexicali. The city is connected with state routes 98 and 111 and is 11 miles south of El Centro. It is the second largest city in Imperial County.

Calexico has strong hot-desert climate with dry heat in the summer. Year-round, Calexico has an abundance of sunshine due to their descending air a high pressure. Since Calexico is situated on top of the border, the city is a bright blend of American and Mexican cultures. Additionally, there are various recreational activities that residents can partake in within the proximity of Calexico—residents can golf, enjoy water sports, hunting, fishing, hiking, and take day trips to both San Diego, CA and Baja California, Mexico.

The two Colonias in Calexico, Kloke and CN Perry, are located near each other in central Calexico. Both Colonias have substantially lower building density than surrounding areas. CN Perry is comprised primarily of a sparsely populated residential neighborhood along CN Perry Avenue while Kloke Colonia is a mix of sparsely populated residential and industrial uses.

## ***El Centro***

El Centro is approximately 13 miles north of the California-Mexico border. The city is connected with Interstate 8 (I-8) and State Routes 11 and 86. It is the county seat of Imperial County and is the largest city in the Imperial County.

The agricultural industry has been an important industry since the 1940s within El Centro due to its proximity to nearby rail lines and I-8. Various farming plots include growing lettuces, carrots, and other crops. The desert-like climate in El Centro has been transformed to thousands of acres of agricultural land, thanks to the Colorado River canals irrigating the valley ground. Additionally, other employment comes from two nearby prisons located in Centinela and Calipatria and from the US Border Patrol station within the area. Aside from employment, there are sites of interest near El Centro such as the Algodones Dunes field and the Salton Sea where visitors explore the area. The Colonia is located within the city limits of El Centro.

El Centro Colonia is located in the northern part of the city of El Centro and its borders to the east extend slightly beyond city limits. The Colonia encompasses a mix of residential areas, commercial areas, and undeveloped space and is adjacent to agricultural land.

## ***City of Imperial***

The City of Imperial is approximately 17 miles north of the California-Mexico border. The city is connected with state route 86 and is 4 miles north of El Centro. It is the fourth largest in Imperial County.

Imperial is home to agricultural land production which drives their economy and employs various individuals in the area. The demand from the agricultural industry for water is supplied by the Colorado river. Showcasing art and culture in Imperial, the city hosts an annual California Mid-Winter fair. The Mid-Winter fair is the largest event held in the county with attractions, concerts, trade shows, car races, and other events for the residents and neighbors of Imperial County. Additionally, the city hosts Market Days where local vendors come and share their work with the community. The Colonia is located within the city limits.

The City of Imperial's North Colonia is a thin strip of land on the eastern border of the city while the South Colonia lies at the southern border of the city. Both Colonias have a mix of relatively low density residential and commercial areas with substantial undeveloped land.



## 2.2 Unincorporated Colonias

### ***Bombay Beach***

Bombay Beach is located approximately 64 miles north of the California-Mexico border. The Colonia has a single entrance located an hour southeast of Palm Springs along state route 111. The town is located right on the Salton Sea and is considered the lowest community in the United States, being 223 feet under sea level.

In the 1950s, Bombay Beach was a popular luxury beach getaway attracting famous celebrities and hundreds of thousands of tourists annually. However, when salty chemical runoff began impacting the quality of the lake and the surrounding area, residents and tourists moved out due to the fear of health problems, flooding, and an increase of dead marine life. Now the city holds a population of 210 residents, down from 929 in 1990, 366 in 2000, and 295 in 2010. The town undergoes an uptick of visitors every year with the Bombay Beach Biennale art festival that attracts artists to showcase their creative works.

### ***Heber***

Heber is located approximately 6 miles north of the California-Mexico border. It is connected with state route 86 and 111 and is located between El Centro and Calexico. Heber has also a semiarid or hot desert climate due to its inland location.

The origins of Heber are tied to the construction of the Southern Pacific Railroad within the Imperial Valley in the early 1900s. The land company in Imperial chose to honor the company president A. H. Heber by name the town after him in 1903. Heber's community decreased with time as a result of El Centro quickly growing and becoming the regional center in the Imperial valley. Heber has continued to be an agricultural community relying on its growth through irrigation.

### ***Niland***

Niland is approximately 45 miles north of the California-Mexico border. State Highway 111 runs north and south along the western portion of the community and is the main arterial in Niland. The Salton Sea is located approximately two miles to the west. The town is bordered to the east and northeast by agricultural fields and the Salton Sea to the west, and extensive agricultural development of the Imperial Valley to the south.

Of the challenges facing the community of Niland, the Niland Fire of June 28, 2021, caused substantial damage destroying more than 40 structures and displacing dozens of

families. In May 2022, Imperial County was awarded a \$4.4 million Community Development Block Grant - Coronavirus Response (CDBG-CV2-3) - from HUD to be used to support Niland residents who lost their homes in the fire.

### ***Ocotillo***

Ocotillo is located approximately 6 miles north of the California-Mexico border. The town is located 26 miles west of El Centro. State Highway 8 and 98 runs west and east along the main arterial in Ocotillo. The Colonia has a dry desert climate which intensifies in the summer.

Ocotillo's location was originally on the edge of the historic Lake Cahuilla and the traditional territory of the Kumeyaay tribe that reside along the South border of California and the North border of Mexico. The town also has a museum called the Imperial Valley Desert Museum which was established through community fundraising and construction. The Museum displays the desert terrain, plants, and Native Indigenous artifacts from the Kumeyaay culture.

### ***Palo Verde***

Palo Verde is located approximately 50 miles north of the California-Mexico border. The Colonia resides just at the top-right edge of Imperial County, bordering Riverside County. State Highway 78 runs north and south along the main arterial in Palo Verde. Palo Verde is also 65 miles northeast of El Centro with a hot desert-like climate.

The Colonia town has a total population of 85 residents. Visitors and residents can visit parts of the surrounding area such as the Colorado River for fishing and swimming, Hauser Geode Beds for exploring, and the Cibola Wildlife refuge areas for trails and wildlife viewing.

### ***Poe***

Poe is located approximately 28 miles north of the California-Mexico border. State Route 78 and 86 run in proximity to the northern and southern portion of the community. The Colonia is a small square and 3.5 miles west of the city of Brawley, CA. The town is in the Colorado Desert and Lower Colorado River Valley location. The Poe Colonia is surrounded by vast agricultural land driving the Imperial Valley's economy.



### ***Salton Sea Beach***

Salton Sea Beach is located approximately 50 miles north of the California-Mexico border. State Route 86 runs north and south along the western portion of the community and is the main arterial in Salton Sea Beach.

The Salton Sea has strong salt content, making the surrounding areas more difficult to live in. The origins of the Salton Sea began in the early 1900s when the Colorado River Canals flooded and formed the Salton Sea. The Sea became a popular tourism destination in the 50s and early 60s, but by the 70s chemical runoff from agricultural farms entered the Salton Sea increasing the high salinity of the sea. No new water was entering the sea and the area experienced minimal rain, hence, resulting in drastic changes to the environment. Animals living in the area could no longer survive around the sea, residents and tourists moved out, and the sea has shrunk throughout the years leaving foul smelling chemicals in the area. One of the communities still standing around the Salton Sea - Salton Sea Beach - has minimal residents.

### ***Seeley***

Seeley is located approximately 12 miles north of the California-Mexico border. The Colonia is directly above I-8 and is 7.5 miles west of El Centro. It is part of the El Centro Metropolitan Area.

Seeley is designated as one of the oldest established communities in Imperial County, with its history tracing back to the early years of the 20th century. It was originally established as a stage stop on the shores of the now-dead Blue Lake. NAF El Centro, the winter home of the Blue Angels, was built adjacent to Seeley in 1946. Agricultural land covers the surrounding area and is a prominent driver for economic gain in the county.

### ***Winterhaven***

Winterhaven (formerly known as Karmack) is located 57 miles east of El Centro and borders Yuma, Arizona. I-8 runs along the southern portion of the community and is the main arterial in Winterhaven. The climate in Winterhaven is desert-like and sunny all year round, but the Colorado river running through the Eastern area of the town helps minimize the heat. A portion of the town is located in Quechan Indian reservation lands.

### 3 Colonia Demographics

The societal demographics across the Colonias are quite diverse, but some general trends can be observed. Most Colonias have dominant majorities of either white or Hispanic individuals (Imperial County itself is 84% Hispanic). Where data is available, virtually all Colonias are relatively poor, with lower income levels and higher rates of poverty compared to other areas in Imperial County. There are also notable systemic differences between Colonias located in incorporated and unincorporated areas.

For incorporated areas, we are unable to match ACS or Census data to the Colonia boundary since it is often a small subset of a larger census tract. However, Census and ACS data suggests that the six Colonias in the four Imperial County cities are all majority Hispanic, with relatively large shares of foreign-born inhabitants. The census tracts that contain the Colonias in El Centro and the City of Imperial are relatively more affluent than those in Brawley and Calexico. Demographic summaries are given below:

- Brawley – majority Hispanic (95%), relatively large foreign-born population (35%), less affluence than other incorporated areas.
- Calexico – majority Hispanic (96%), relatively large foreign-born population (45%), less affluence than other incorporated areas.
- El Centro – majority Hispanic (83%), relatively large foreign-born population (30%), higher affluence than other incorporated areas.
- Imperial (city) – majority Hispanic (79%), relatively large foreign-born population (21%), higher affluence than other incorporated areas.

For unincorporated areas, we were typically able to match Colonia boundaries to census-designated places, allowing full use of Census and ACS data. However, given the small sizes of many of the populations, the nature of ACS sampling often leaves a large margin of error so demographic data should be used cautiously. Census data is much more reliable but limited 2020 data has been released. Nonetheless, some general trends are clearly observed. In unincorporated areas, Colonias are either majority white or Hispanic, and most are relatively poor with low levels of income and high levels of poverty. Almost all Colonias have declining populations except for Heber and Palo Verde. Demographic summaries are below.

- Bombay Beach – majority white (57%), declining population, increasing incomes but high levels of poverty.

- Heber – majority Hispanic (97%), relatively large foreign-born population but declining, increasing population, relatively affluent.
- Niland – majority Hispanic (74%), decreasing population, less affluence but increasing and high poverty rates.
- Ocotillo – majority white but declining (74%), decreasing population, less affluence but increasing and high poverty rates.
- Palo Verde – majority white and elderly (66%), increasing population, relatively affluent.
- Poe (no Census match) – majority Hispanic (62%), relatively affluent.
- Salton Sea Beach – majority Hispanic (71%), declining population, fluctuating income, and high levels of poverty
- Seeley – majority Hispanic (89%), relatively large foreign-born population, increasing population, declining income, relatively high levels of poverty.
- Winterhaven – majority Hispanic (75%), relatively large foreign-born population, decreasing population, low-income, and high poverty.

## 4 Housing Assessment

Each Colonia profile has a detailed housing assessment highlighting structure-by-structure housing inventory and other features related to housing. Here we use ACS data where appropriate to develop a baseline analysis of housing characteristics such as housing tenure, housing issues (cost burden and overcrowding), and vacancy. These baselines add further details to the profiles, offering a holistic view of the residential community.

### 4.1 Housing Tenure

Housing tenure refers to whether a unit is owned or rented. Tenure is an important characteristic to consider for a few reasons. First, tenure can be used as an indicator of the housing market, such as affordability, stability, and mobility. Communities with higher rates of renters will be more affordable, less stable, and have higher rates of mobility. Second, tenure distribution typically correlates with household income and age of the owner. Homeowners tend to have higher incomes and are older on average.

In incorporated areas, housing tenure closely follows our findings from the demographic profile where we find that census tracts that contain the El Centro and the City of Imperial colonias are relatively more affluent than those found in Brawley and Calexico. For tenure, we find that the El Centro and City of Imperial census tracts have a majority of homeowners compared to renters which is comparatively higher than Brawley and Calexico whose distribution is more evenly split.

In unincorporated areas, housing prices are typically quite depressed and often do not correlate with affluence. We find that all Colonias in unincorporated areas have higher rates of owners versus renters except for Seeley, which has a slight majority of renters.

## **4.2 Housing Issues**

Our housing assessment considered two common issues: cost burden and overcrowding. Housing cost burden is defined as a housing cost that exceeds 30 percent of a household's gross income. A severe cost burden is a housing cost that exceeds 50 percent of a household's gross income. Housing cost burden is particularly problematic for low- and moderate-income households in that it leaves little resources for a household to pay for other living expenses.

In incorporated areas, we find that many renters are cost burdened in the census tracts that contain the Colonias. This is especially true in El Centro, Calexico, and Brawley, where over a third of renters' report being severely rent burdened. Although severe rent burden is less in Imperial, we still find nearly half of renters have a rent burden. In unincorporated areas, results are a little less reliable since ACS sampling technique in these small populations inherently has a large margin of error for this type of measurement. However, the data suggests that renters in these Colonias face rent burdens as well.

We also consider overcrowding. An overcrowded unit is defined by the Census as having more than one person per room, excluding kitchens and bathrooms. A severely overcrowded unit has 1.5 or more persons per room. As witnessed by the COVID-19 pandemic, communities with overcrowding often faced the largest burden of disease and it is now an important public health consideration to housing.

Overcrowding appears to be more of an issue in incorporated than unincorporated Colonias. This is logical given rising housing costs in urban areas are forcing families or groups to live in smaller units than rural areas. El Centro, Calexico, and Brawley all have the highest rates of overcrowding in incorporated areas. Heber, Salton Sea Beach, and Seeley in unincorporated areas all report some overcrowding but typically less than incorporated areas.

### **4.3 Vacancy Rates**

We also present data on homeowner and rental vacancy rates. Vacancy rates are important metrics for the health of the housing and rental markets. General industry standards indicate that vacancy rates of five to six percent for rental housing and one to two percent of ownership housing is sufficient to provide choice and mobility. Too low of a vacancy rate and residents are unable to find compatible housing replacements and can lead to displacement. Too high of a vacancy rate can mean an oversupply of units leading to investment risk, depressed home values, and collateral depreciation from neglect.

The vacancy data suggests that the housing and rental markets are better functioning in incorporated Colonias. Both El Centro and the City of Imperial have housing and rental vacancy rates near industry standards, while Brawley and Calexico have more limited vacancy rates. In unincorporated Colonias, we find either extremely limited vacancy rates or significant vacancies, effectively demonstrating the housing and rental markets are not operating efficiently. For housing, all the Colonias in unincorporated areas have very limited vacancy either below the industry standard or no availability at all. The one exception is Salton Sea Beach which has relatively large vacancy rate for homes indicating there are houses on the market that are unable to sell. For rentals, Heber, Ocotillo, and Seeley have rental vacancy rates below the industry standard, while Bombay Beach, Niland, Palo Verde, Salton Sea Beach, and Winterhaven are above.

**Table 1: Incorporated Colonias**

Category	Brawley	Calexico	El Centro	Imperial
% owners	46	49	58	71
% renters	54	51	42	29
% Single Family Homes	59	62	67	77
% Multifamily	36	30	29	19
% Trailers and RVs	5	8	4	4
Number of Vouchers	159	0	13	81
Public Housing Units	151	0	0	0
% Rent Burdened	65	48	48	57
% Severely Rent Burdened	37	34	8	32
Homeowner Vacancy Rate	1	0	1	1
Rental Vacancy Rate	2	2	6	4
% Overcrowding (>1.0 per room)	14	12	4	16
% Severe Overcrowding (>1.5 per room)	3	5	1	8



**Table 2: Unincorporated Colonias**

Category	Bombay Beach	Heber	Niland	Ocotillo	Palo Verde	Poe	Salton Sea Beach	Seeley	Winter-haven
% owners	67	69	65	70	81	68	62	47	60
% renters	33	31	35	30	19	33	39	53	40
% Single Family Homes	50	63	64	74	16	94	52	42	53
% Multifamily	4	24	0	0	0	0	0	29	0
% Trailers and RVs	47	14	36	26	84	6	48	29	47
Number of Vouchers	0	0	0	0	0	0	0	0	0
Public Housing Units	0	0	0	0	0	0	0	0	0
% Rent Burdened	100	55	100	0	55	27	72	52	100
% Severely Rent Burdened	100	21	100	0	0	5	72	17	100
Homeowner Vacancy Rate	2	1	0	1	0	0	5	1	0
Rental Vacancy Rate	9	2	17	3	16	7	12	3	28
% Overcrowding (>1.0 per room)	0	8	7	0	0	12	11	4	0
% Severe Overcrowding (>1.5 per room)	0	3	0	0	0	3	11	0	0

#### 4.4 Housing Inventory

The bulk of our housing assessment is focused on current housing inventory, which is the most comprehensive counting of buildings in the Colonias to date. To develop a comprehensive understanding of housing in the Colonias we carried out an independent assessment of all buildings in each Colonia. Our assessment leveraged Google Earth satellite imagery and relied on a combination of AI-based building detection algorithms, Microsoft Building Footprints data<sup>4</sup>, and manual labeling to identify structure perimeters. The analysis then combined available data sources such as Google Streetview and Open Street Map<sup>5</sup> with manual labeling and validation to assess building uses. In addition to permanent structures, mobile homes and RVs were also mapped, which are typically missed in other datasets, yet represent a substantial portion of households in Colonias.

Interested parties should refer directly to the relevant Colonia profile of interest where structures are spatially mapped. The housing inventory is useful for describing the mix of

<sup>4</sup> <https://www.microsoft.com/en-us/maps/building-footprints>

<sup>5</sup> <https://www.openstreetmap.org/>

housing in Colonias. In incorporated areas, we find that single family homes (SFH) are the most frequent source of housing especially in Calexico and El Centro representing roughly 80% of units. Mobile homes/trailers are also common in all Colonias in incorporated cities ranging from 10 – 20% of the housing stock. Apartments are more common in Brawley and the City of Imperial, yet both Colonias still have a significant presence of SFHs.

In unincorporated areas we find a slightly more heterogeneous mix of housing, with some communities closely resembling those in incorporated areas, while others have a much larger presence of mobile homes. Ocotillo, Poe, and Seeley all resemble the housing mix of incorporated areas with a majority of SFHs and between 10-20% of mobile homes for the remaining housing stock. The remaining Colonias all have a large presence of mobile homes, and in some cases mobile homes represent most of the housing stock. Salton Sea Beach for example, has nearly 75% of its buildings represented by mobile homes.

**Table 3: Housing Inventory Unincorporated Colonias**

Type	Bombay Beach		Heber		Niland		Ocotillo		Palo Verde	
	Number Identified	% Units	Number Identified	% Units	Number Identified	% Units	Number Identified	% Units	Number Identified	% Units
Single Family Home	198	49	173	70	188	53	165	89	118	63
Apartment	--	--	4	2	0	0	0	0	0	0
Mobile Home/Trailer	203	51	69	28	169	47	20	11	68	37
<b>Total</b>	<b>401</b>	<b>100</b>	<b>246</b>	<b>100</b>	<b>357</b>	<b>100</b>	<b>185</b>	<b>100</b>	<b>186</b>	<b>100</b>
Vacant units	18	--	--	--	5	--	--	---	--	--
RVs	97	--	5	--	4	--	12	--	75	--

Type	Poe		Salton Sea Beach		Seeley		Winterhaven	
	Number Identified	% Units	Number Identified	% Units	Number Identified	% Units	Number Identified	% Units
Single Family Home	716	66	144	82	286	79	69	52
Apartment	10	1	--	--	3	1	--	--
Mobile Home/Trailer	235	22	--	--	3	1	42	32
<b>Total</b>	<b>117</b>	<b>11</b>	<b>32</b>	<b>18</b>	<b>69</b>	<b>19</b>	<b>22</b>	<b>17</b>
Vacant units	1,078	100	176	100	361	100	133	100
RVs	2	--	2	1	1	--	4	-

#### 4.5 Housing Occupancy

Housing occupancy is another important metric that demonstrates how many homes are vacant within a community. Note that this measurement is distinct from a vacancy rate which measures homes or rental that are actively for sale or rent that are unoccupied. Instead, housing occupancy measures homes that are routinely vacant but are not

actively trying to be sold or rented. This metric is important because it helps identifies communities that have a large presence of empty homes.

The Census presents data on vacancy status of housing units and importantly offers various categories. Our interest here is twofold. First, we want to identify communities with a large presence of vacant homes. Second, we want to identify if these vacancies are mostly due to seasonal or recreational use, or something else such as blight. Although blight is not directly measured in Census data, communities with large number of vacant homes listed in the “other vacant” category should be flagged as it can contain blighted homes or homes in a state of disrepair.

Vacant buildings are primarily a concern in unincorporated areas. In incorporated areas, we do not find abnormal levels of vacant units suggesting these communities are well populated. In unincorporated areas however, some Colonias stand out with significant numbers of vacant homes. These communities are largely characterized by vacancies from seasonal or recreational use or those with blight. Both Ocotillo and Palo Verde have vacancies characterized by seasonal or recreational use, reflecting the fact these locations are popular recreational areas. Bombay Beach and Salton Sea Beach also have a large number of vacant homes for seasonal or recreational use, but blight in these communities is a concern as well with numerous vacant homes in the “other vacant” category.

**Table 4: Housing Occupancy - Unincorporated Colonias (percent)**

Category	Bombay Beach	Heber	Niland	Ocotillo	Palo Verde	Poe	Salton Sea Beach	Seeley	Winter-haven
<b>Total Housing Units</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Occupied Housing Units</b>	<b>35.8</b>	<b>97.5</b>	<b>83.9</b>	<b>48.4</b>	<b>54.9</b>	<b>94.3</b>	<b>58.0</b>	<b>95.4</b>	<b>82.9</b>
<b>Vacant Housing Units</b>	<b>64.2</b>	<b>2.5</b>	<b>16.1</b>	<b>51.6</b>	<b>45.1</b>	<b>5.7</b>	<b>42.0</b>	<b>4.6</b>	<b>17.1</b>
<b>For Rent</b>	<b>1.1</b>	<b>0.6</b>	<b>6.1</b>	<b>0.5</b>	<b>2.0</b>	<b>2.4</b>	<b>3.0</b>	<b>1.5</b>	<b>14.0</b>
<b>Rented, not occupied</b>	<b>0.0</b>	<b>0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>3.0</b>
<b>For sale only</b>	<b>0.5</b>	<b>0.4</b>	<b>0.0</b>	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>2.0</b>	<b>0.4</b>	<b>0.0</b>
<b>Sold, not occupied</b>	<b>7.9</b>	<b>0.2</b>	<b>1.5</b>	<b>2.7</b>	<b>0.7</b>	<b>0.0</b>	<b>0.0</b>	<b>1.7</b>	<b>0.0</b>
<b>For seasonal, recreational, or occasional use</b>	<b>37.9</b>	<b>0.1</b>	<b>3.6</b>	<b>42.5</b>	<b>39.9</b>	<b>3.0</b>	<b>25.7</b>	<b>0.4</b>	<b>0.0</b>
<b>For migrant workers</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Other vacant</b>	<b>16.8</b>	<b>1.0</b>	<b>4.8</b>	<b>5.5</b>	<b>2.6</b>	<b>0.0</b>	<b>11.3</b>	<b>0.7</b>	<b>0.0</b>

**Table 5: Housing Occupancy by Type (percent) - Incorporated Colonias**

	<b>Brawley</b>	<b>Calexico</b>	<b>El Centro</b>	<b>Imperial</b>
<b>Category</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>
<b>Total Housing Units</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>96.2</b>
<b>Occupied Housing Units</b>	<b>96.4</b>	<b>97.3</b>	<b>95.2</b>	<b>3.8</b>
<b>Vacant Housing Units</b>	<b>3.7</b>	<b>2.7</b>	<b>4.8</b>	<b>1.2</b>
<b>For Rent</b>	<b>1.2</b>	<b>0.8</b>	<b>2.4</b>	<b>0.4</b>
<b>Rented, not occupied</b>	<b>0.5</b>	<b>0.3</b>	<b>0.5</b>	<b>0.5</b>
<b>For sale only</b>	<b>0.2</b>	<b>0.2</b>	<b>0.4</b>	<b>0.1</b>
<b>Sold, not occupied</b>	<b>0.2</b>	<b>0.2</b>	<b>0.5</b>	<b>0.4</b>
<b>For seasonal, recreational, or occasional use</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>1.1</b>
<b>For migrant workers</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Other vacant</b>	<b>1.3</b>	<b>0.8</b>	<b>0.9</b>	<b>0.0</b>



## 4.6 Other Housing Characteristics

We also present data on a variety of other housing characteristics depending on the availability of data for each Colonia. These topics include housing values, age of the housing stock, and zoning.

Housing values in incorporated areas are higher than those in unincorporated areas which is logical given they are in urban areas. The census tracts that contain the Colonias in the City of Imperial and El Centro have higher housing values than the Imperial County median of \$220,000. The census tracts that contain Colonias in Calexico and Brawley are below the median, but still above those found in unincorporated areas.

In unincorporated areas, housing values are often quite depressed. Bombay Beach and Salton Sea Beach have the lowest median value<sup>6</sup> of approximately \$50,000, which is well below both the Imperial County median value and the total unincorporated area median value of \$136,000. The next tier of Colonias all contain home values approximately near the median and include Niland, Ocotillo, and Seeley. Heber and Poe both have relatively higher housing values, near the range found in incorporated areas which makes sense because they are in close proximity to cities. There is no recent data for Palo Verde and Winterhaven, but both appear to have depressed values closer in range to those found in Bombay Beach and Salton Sea Beach.

In regard to the age of the housing stock, the distribution is quite varied depending on the Colonia in question. Generally speaking, most Colonias tend to have a steady amount of housing production and have been built out slowly over time. In unincorporated areas, we see a different trend in some Colonias where housing production has largely stopped. This includes Bombay Beach, Ocotillo, and Salton Sea Beach whose production has largely stopped after 2000.

Zoning is also quite mixed depending on the location, but one important thing to identify is the presence of vacant lots as it identifies how relatively undeveloped some Colonias are. In incorporated areas we see that roughly 23 – 29% of the total area is zoned as vacant. In unincorporated areas, we see slightly higher number of areas designated as vacant, with Ocotillo an outlier with nearly 65% of its area designated as vacant. Zoning is also useful for demonstrating the lack of space dedicated to commercial activity. Virtually all Colonias have limited commercial activity.

---

<sup>6</sup> Among Colonias where housing prices are available

## 4.7 RHNA and Housing Elements

The Regional Housing Needs Allocation (RHNA) process refers to the first two steps (Determination and Allocation) of a multi-step process that California governments utilize to plan for housing needs in each region of the state. As part of the recent 6th RHNA cycle, the California Department of Housing and Community Development (HCD) determined that SCAG should allocate some 1.34 million homes. Of these, Imperial County has been given 15,993 units. Imperial County has allocated the units accordingly in areas that contain Colonias (Table X below). Given these jurisdictions contain Colonias, it is worthwhile to review the specific Housing Elements and determine if locations in Colonias are planned for future housing growth.

**Table 6: SCAG 6<sup>th</sup> Cycle RHNA Allocation Plan for Local Jurisdictions with Colonias**

Jurisdiction	Total	Very-low income	Low income	Moderate Income	Above moderate Income
<b>Brawley</b>	<b>1,426</b>	<b>399</b>	<b>210</b>	<b>202</b>	<b>615</b>
<b>Calexico</b>	<b>4,868</b>	<b>1,279</b>	<b>655</b>	<b>614</b>	<b>2,320</b>
<b>El Centro</b>	<b>3,442</b>	<b>1,001</b>	<b>490</b>	<b>462</b>	<b>1,489</b>
<b>Imperial</b>	<b>1,601</b>	<b>704</b>	<b>346</b>	<b>294</b>	<b>257</b>
<b>Unincorporated Imperial</b>	<b>4,301</b>	<b>1,203</b>	<b>596</b>	<b>580</b>	<b>1,922</b>

Each of the four incorporated cities with Colonias have submitted their Housing Elements to the California Department of Housing and Community Development (HCD), although only two are currently in compliance (El Centro and the City of Imperial). All cities have identified sites within Colonia boundaries that they believe are suitable for additional housing. Importantly, the cities note that existing infrastructure is sufficient for the increased housing. The number of sites and units are as follows:

- Brawley has identified 8 sites for a potential 514 units of housing.
- Calexico has identified 9 sites for a potential 180 units of housing.
- El Centro has identified 4 sites for a potential 53 units of housing.
- The City of Imperial has identified 8 sites for a potential 356 units of housing.

The responsibility of planning for housing in unincorporated areas falls to the County of Imperial, whose Housing Element has been accepted and is currently in compliance. The bulk of future development for the county is planned in areas adjacent to Heber or Brawley, and none of the identified sites are within the Colonia boundaries. These areas are identified as suitable for future development primarily due to their close ties to incorporated areas and robust provision of utilities. Heber especially has been identified as a priority area due to the Heber Public Utilities district (HPUD). HPUD has sufficient capacity to accommodate the water and wastewater needs of projected development during the planning period within its service area.

The county also acknowledges the potential for ADUS and mobile homes for additional housing, but this is a minor portion of the planned units and specific sites are not called for. While Colonias could contain these units of housing they are not directly identified and are not a major source of additional housing at the county level.

## 5 Infrastructure Overview

The Colonia profiles next have an infrastructure overview where we provide an up-to-date profile of primary public goods and services from infrastructure, including private alternatives where these are needed and available. We primarily focus transportation (including roads and pedestrian networks), water, electricity (including streetlights), and waste collection. The provision of infrastructure varies across Colonias, with some having the majority of their needs met and others lacking basic services. The section of the report highlights the Colonias where infrastructure is inadequate, and improvements should be prioritized.

### 5.1 Transportation

For transportation the Colonia profiles discuss the pedestrian network, roads, and public transportation.

#### ***Pedestrian Network***

A safe and extensive pedestrian network is often a major source of concern in Colonias, many of which lack basic safety standards such as sidewalks. Imperial County released a Pedestrian Master Plan in 2021 which specifically considered improvements to 6 unincorporated communities, 5 of which are Colonias. These include Heber, Niland, Ocotillo, Seeley, and Winterhaven, which were selected for their lack of sidewalks, crosswalks, shading, street lighting, and bike paths. Importantly, Heber, Niland and

Seeley all have schools, and the lack of sidewalks and crosswalks creates significant hazards for families in the communities.

The remaining Colonias face many of the same challenges as highlighted in the Master Plan. These communities also lack formal sidewalks, established walking paths, crosswalks, and bicycle paths. For unincorporated areas, it remains a challenge to create links between these communities and urban cities due to a lack of funding, long distances between destinations, low density, and dependence on personal vehicles for transportation.

### ***Roads***

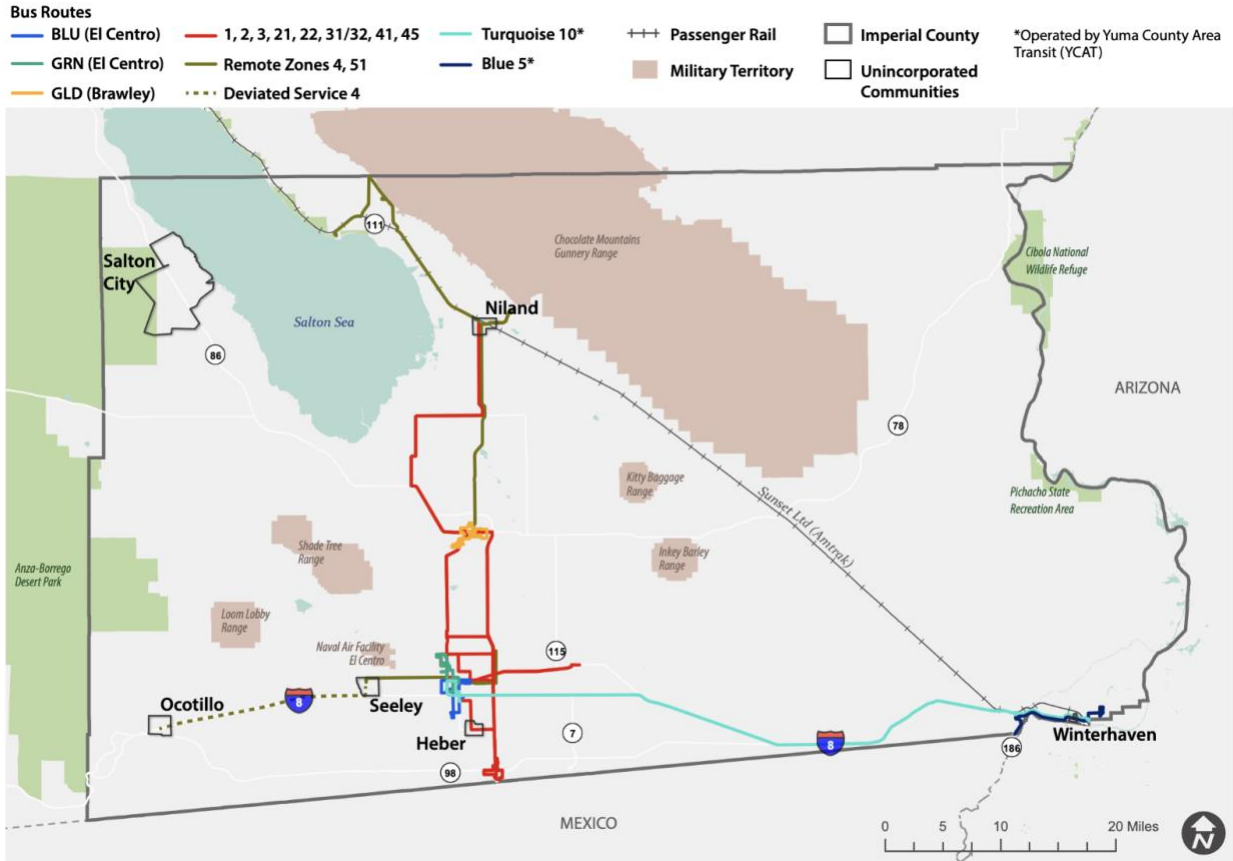
In order to assess road surface in each Colonia we analyzed Google Earth satellite imagery and Google Streetview imagery and assigned a road surface type to each section of road. These results are displayed graphically and numerically in the individual Colonia reports. Most Colonias are a mix of road types between paved/asphalt, unpaved (improved), and unpaved (unimproved). The majority of roads are paved, but it is quite common for secondary roads to be unpaved. The Colonias in incorporated areas skew slightly more towards paved than unincorporated, but the discrepancy is not typically significant. Furthermore, some of the smaller Colonias such as Palo Verde are shown to have a comparatively large number of unpaved roads (42%), however the total amount of roads is quite small (1.6 miles).

### ***Public Transportation***

The Imperial Valley Transportation District (IVT) runs 13 bus lines that provide varying access to the Colonias. Three lines are focused for commuting within the cities of El Centro and Brawley, while the others provide longer distance access between cities and unincorporated areas. Additionally, Yuma County Area Transit (YCAT) runs two lines providing access to Winterhaven. A map of the lines is displayed below.

The Colonias in incorporated areas are relatively well served by public transportation, especially El Centro and Brawley with dedicated bus lines that circle throughout the city. As for unincorporated areas, Bombay Beach, Niland, Heber, Seeley, and Winterhaven are all served by public transportation. Imperial Valley Transportation District (IVTD) does not currently operate any bus lines that connect to the Poe Colonia directly. The closest public transportation access is in Brawley approximately 2.7 miles from the entrance of the Poe Colonia. Palo Verde, Ocotillo, and Salton Sea Beach are all not served by any public transportation.

### **Figure 2: Imperial County Public Transportation Routes**



## 5.2 Water

Water infrastructure refers untreated water (for agriculture), treated water (for domestic use), and wastewater. Colonias in incorporated areas generally all have sufficient water infrastructure, with treated water and wastewater provided by the city. In unincorporated areas, water infrastructure varies significantly and is under the jurisdiction of relevant Imperial Local Agency Formation Commission (LAFCO) Special Water Districts.

### *Untreated Water*

Untreated water is intended for agriculture and municipal use and is supplied by the Imperial Valley Irrigation District (IID). Although untreated water is not intended for personal use, recent reporting has found approximately 3,000 rural homes have no source treated water and instead rely on irrigation canals for washing dishes, showering, and cleaning. Although there are canals in Seeley, Heber, and Niland, no canals run directly through any Colonia boundary, therefore residents in these communities are likely not pulling water from canals. Furthermore, while individual property connectivity to IID

water is available, due to the Safe Water Drinking Act all water users are required to have an alternative source of water for drinking and cooking purposes.<sup>7</sup> Water users that fail to maintain this alternative water access will be disconnected from IID’s canal water system.

### ***Treated Water***

IID’s water service area encompasses the cities of Brawley, Calexico, El Centro, City of Imperial, Niland (which is provided through a private company Golden State Water Company), Seeley and Heber. The remaining Colonias receive water from either the Coachella Valley Water District (Bombay Beach and Salton Sea Beach), groundwater (Ocotillo), or Yuma, Arizona (Winterhaven).

Therefore, the Colonias in incorporated areas are served by their municipal water plant via the IID and houses receive piped, treated water. Stakeholders did not relay any concerns with water reliability or availability in these communities.

In unincorporated areas, the provision of treated water is more varied. Some communities do not have issues with treated water, such as Niland and Heber, both of which are served by treatment facilities where the IID have adequate capacity. Poe also does not have issues with treated water as it receives water from Brawley. For the other unincorporated areas, treated water is provided by a patchwork of special districts, all of which face concerns.

Bombay Beach and Salton Sea Beach are both serviced by the Coachella Valley Water District. Construction is currently underway on a new water treatment plant. The system for water treatment is currently at capacity so the added treatment facility will make expansion feasible (no new water meters are currently being approved in many of the surrounding areas). In addition, with current infrastructure there is a single point of failure in the water supply and this facility will provide a reliable emergency source of water.

Ocotillo, Seeley, Palo Verde, and Winterhaven all receive treated water from independent special water districts and each system needs improvements. Winterhaven and Seely, report having rising costs and aging infrastructure that is failing and needs continuous improvements. Both Palo Verde and Ocotillo receive their water from aquifers. Ocotillo uses water tanks sourced from the Coyote Wells Hydrologic Subunit aquifer, which has been described to be in a state of overdraft, characterized by declining groundwater levels since the 1970s.

---

<sup>7</sup> <https://www.iid.com/water/service-pipe-customers/safe-drinking-water-act>



## **Wastewater**

Public sewer services are available within the incorporated cities of Brawley, Calexico, El Centro, and City of Imperial. In unincorporated areas, Bombay Beach, Salton Sea Beach, Heber, Poe, Seeley, Niland, and Winterhaven also have public sewer systems. Private septic system utilization is predominately concentrated in Ocotillo and Palo Verde.

Of the communities with sewer services, Seeley has faced recent issues exceeding effluent limitations for copper numerous times in 2017-2018. Although the Seeley County Water District (SCWD) is working on improvements, increased funding would be beneficial.

For the communities with septic tanks, it is the owner's responsibility to ensure septic systems are operating correctly. Palo Verde has been working on a wastewater treatment plant since 2011 and is a significant priority for the community.

### **5.3 Electricity**

For all Colonias except Palo Verde, electricity is provided by the IID. Detailed maps containing individual parcel connectivity, locations of underground and over ground primary and secondary conductors as well as existing streetlights are provided in the relevant Colonia profiles. The provision of electricity does not appear to be an issue in any of the Colonias. Adequate lighting is often an issue however, and virtually all communities, especially those in unincorporated areas would benefit from improved quality/reliability and quantity of street lighting.

Electricity in Palo Verde is provided by Southern California Edison.

### **5.4 Solid Waste Collection**

Imperial County does not have a mandatory trash service requirement, and it is therefore up to individual households and businesses to choose whether to participate. The county also operates drop-off collection sites in some of these areas, so residents may be directly hauling trash. There are three providers that service the Colonias with varying degrees of service: Republic Services, CR&R, and Burrtec.

For areas with franchise agreements, residents receive weekly trash, recycling, and organics collections. Additionally, Republic Services offers bulky item collection and bi-annual "clean-up" events. Franchise agreements are billed to the city directly, who then bill customers via municipal water and sewer utilities. For open market agreements,

residents are free to choose a service provider. If residential cart service is offered, these are collected weekly, while commercial or industrial bins are collected on a scheduled basis. A summary of service providers and services offered is provided below.

### ***Republic Services Franchise***

Residential (R), Commercial (C), and Industrial Services (I) offered:

- Brawley
- Calexico
- City of Imperial
- Winterhaven

### ***Republic Service open market***

- Brawley-Poe (R,C,I)
- Bombay Beach (C,I)
- Ocotillo (C,I)
- Niland (C,I)
- Seeley (R,C,I)

### ***CR&R***

- El Centro - Franchise
- Heber - Franchise
- Palo Verde

### ***Burrtec***

- Salton Sea Beach

For the communities with no residential waste collection (Bombay Beach, Ocotillo, and Niland), it is up to individual households to dispose of trash. Without residential pickups, individuals must drive their trash to the dump. One of the commonly used facilities is in the City of Imperial, roughly 45 minutes away by car from some communities. Ocotillo has a dump, but the hours are limited. Trash disposal is thus particularly challenging for individuals without transportation. As a result of the lack of regular trash collection, there are substantial amounts of trash stored in and around these communities.

## 6 Infrastructure Recommendations

Based on the review of infrastructure, we rank the needs of Colonias according to triage categories of Critical, Basic, and Improve. “Critical” needs are infrastructure features and services that are either non-existent, failing, and near their breakdown point. While many residents in Colonias have substandard living conditions, Critical infrastructure facilities should be prioritized to improve the standard of living in these communities. “Basic” needs are the next category and represent infrastructure features and services that would provide residents with a standard of living corresponding to a representative or “average” Imperial County community. Finally, the “Improve” category represents aspirational upgrades infrastructure and services that would be beneficial to the community but are less than immediate or essential to meet basic needs.

These rankings are summarized schematically in the following tables. Generally, the provision of infrastructure in Incorporated Areas is relatively better and the only Critical or Basic needs identified there relate to Housing Affordability (Table 7). High rent burdens and overcrowding are common. However, while many infrastructure improvements could significantly increase the quality of life for residents, these are not as urgent as some infrastructure needs in unincorporated areas.

**Table 7: Schematic Ranking of Infrastructure Needs – Incorporated Colonias**

Category	Brawley	Calexico	El Centro	Imperial
Treated Water				
Wastewater Management				
Residential Refuse Collection				
Public Transportation				
Street lighting	Improve	Improve	Improve	Improve
Pedestrian Network	Improve	Improve	Improve	Improve
Improved Roads	Improve	Improve	Improve	Improve
Affordable Housing	Critical	Critical	Basic	Critical

The situation in Unincorporated Colonias (Table 8) is quite different, with Critical needs in all but one community and Basic needs in all nine of these low-income communities.

**Table 8: Schematic Ranking of Infrastructure Needs – Unincorporated Colonias**

Category	Bombay Beach	Heber	Niland	Ocotillo	Palo Verde	Poe	Salton Sea Beach	Seeley	Winterhaven
Treated Water	Critical	Basic		Critical	Basic		Critical	Critical	Critical
Wastewater Management				Critical	Critical	Basic	Critical	Critical	Critical
Residential Refuse Collection	Critical		Critical	Critical				Critical	
Public Transportation	Basic		Basic	Basic	Basic		Basic		Basic
Street lighting	Improve	Improve	Improve	Improve	Improve	Improve	Improve	Improve	Improve
Pedestrian Network	Improve	Basic	Critical	Improve	Improve	Basic	Improve	Basic	Improve
Improved Roads	Improve	Improve	Improve	Critical	Improve	Improve	Improve	Improve	Improve
Boundary Delineation		Basic							
Post and Telecom			Critical						
Affordable Housing	Critical	Critical	Critical		Improve	Critical	Critical	Critical	Critical

Improving treated water provision is the most common Critical need, and the extent of this deficiency suggest there could be far reaching impacts on public health. Among the five Unincorporated Colonias with Critical treated water needs (Bombay Beach, Ocotillo, Salton Sea Beach, Seeley, Winterhaven), the main issues are systems at capacity, systems at risk of failure, water supply depletion, and compromised water quality. Individual water districts have varying capacities to address these challenges.

The Coachella Valley Water District (CVWD), which provides drinking water to Bombay Beach and Salton Sea Beach Colonias, has secured more than \$14 Million in funding in recent years to help address water issues that affect these Colonias.<sup>8</sup> Both Colonias face issues with water system failure risk (old equipment with a single point of failure) and Bombay Beach Colonia also faces issues with system capacity (no new water meters are currently being approved in the area). \$5 Million in loans acquired by CVWD has been allocated to upgrading the booster pump station that serves Bombay Beach Colonia. If the 55-year-old booster station were to fail, residents would only have water for a few hours before the system was entirely depleted. The project is currently in the design phase and planned to be completed by 2026. An additional \$6.8 Million in grant money has been acquired by CVWD to construct a new water treatment plant with a service area that includes Bombay Beach Colonia. The new treatment plant would both expand capacity to deliver water to new connections and prevent the water supply to the area from having a single point of failure. This project is in the construction phase and planned to be completed by 2025. Separately, \$1.25 has been raised via grants and service charges to work on providing a secondary redundancy to the water system servicing the Salton Sea Beach Colonia area in order to reduce risk of system failure. While the CVWD

<sup>8</sup> <https://www.cvwd.org/ArchiveCenter/ViewFile/Item/1007>

is a relatively large independent special district (it's service area covers approximately 1,000 miles) other Colonias including Ocotillo, Seeley, and Winterhaven are served by smaller water districts with more limited capacity to raise funds and implement system upgrades on their own.

Ocotillo Colonia is serviced by two small special water districts (Ocotillo Mutual Water Company and Coyote Valley Mutual Water Company) and faces challenges with water supply depletion and poor water quality. Following an infection of Ocotillo Mutual Water Company's water supply that rendered water delivered to half the Colonia undrinkable 15 years ago, Imperial County constructed an underground backup system that can be turned on if needed to limit system failure risk. However, the aquifer that is the principal source of drinking water for the Colonia has been continually overdrafted since the 1970s and is quickly becoming depleted such that available water is of degrading quality and is becoming more difficult and costly to extract.

Seeley County Water District (SCWD) and Winterhaven Water District both face challenges with potential system failure due to aging infrastructure and insufficient funding for system maintenance. In recent years, Imperial County has utilized Community Development Block Grants to help fund system upgrades in both Colonias. The county secured \$350,000 through Community Development Block Grant 17-CDGB-12013 to fund waterline improvements in Seeley and \$550,000 through CDBG 12-CDBG-8394 to fund improvements in Winterhaven that included recoating of existing water tanks, replacing fire hydrants, and making repairs to the lift station. While these funds have helped to address much needed system improvements, both districts report needing continual upgrades because service fee revenues are insufficient to support maintenance of the old and failing infrastructure. As such, water and sewage line breaks continue to be common.

The next most common infrastructure need was wastewater management which was deemed Critical in Seeley, Winterhaven, Palo Verde, and Ocotillo Colonias and Basic in several others. As with treated water, both Seeley and Winterhaven rely on aging infrastructure with frequent line breaks and insufficient fee revenue to fund system maintenance. Neither Palo Verde nor Ocotillo Colonias have access to sewer systems and are instead serviced by private septic tanks. In Palo Verde, a wastewater treatment plant has long been a high priority for the community as most of the homes are within 600 feet of an impaired water body which feeds into the Colorado River. While there have been discussions of constructing a wastewater treatment plant for more than a decade, funding requirements are substantial. Various studies have been done over the years, and current estimates anticipate the wastewater treatment plans costing \$20 million and requiring 11 acres. In Ocotillo, according to the Imperial County Public Health

Department 9, geological factors make construction of a wastewater treatment plant particularly challenging and expensive. As such, there are currently no plans to construct an onsite facility. In these cases where Colonias do not have access to sewer systems, restrictions are often enacted to limit new developments until public water and sewer services are available. For example, the Ocotillo Community Area Plan has minimum parcel size requirements for any new residential lot to ensure continued low density until public water utilities become available.

Niland also has Critical pedestrian safety risks (particularly for school-bound children), as the community is bisected by a state highway with no intersections or overhead passages. To address these needs, Imperial County's 2020 Pedestrian Master Plan<sup>10</sup> recommended 16 specific improvements that include installation of new crosswalks, signals, pedestrian paths, and lighting along common pedestrian routes. Funding the implementation of these recommendations has potential to greatly improve this area of need. A second Critical need in Niland is absence of a post office. Pedestrian safety was a Basic need in other communities, where we heard frequent complaints about substandard or non-existent sidewalks and crossings.

Another common public service deficiency in unincorporated Colonias was public transit and regular refuse collection. These could be delivered by local authorities or private contractors, but at the moment the communities have no resources available for this. In some Colonias where residential waste collection services are available from private companies, services are unaffordable for many and thus residents resort to individually transporting their trash to dumps. This creates particular challenges for less mobile residents and can also be prohibitively costly or inconvenient leading to solid waste accumulation. Finally, Ocotillo has a Critical need for road improvement as several key roadways are in disrepair such that residents to avoid driving in certain areas all together.

One of the most important categories of deficiency is in Housing Affordability. In the context of the present study, this category is of special significance because of concerted initiative by SCAG, the state of California, and the Federal Government to address Southern California housing needs. In particular, the Regional Housing Needs Assessment (RHNA), a state mandated process that determines the existing and projected housing needs for each jurisdiction within the state of California. SCAG conducted its own engagement process to develop recommendations that will be submitted to HCD to inform their RHNA reform process. On behalf of the thirteen

---

9

[https://www.icphd.org/media/managed/environmentalhealth/Imperial\\_County\\_Local\\_Agency\\_Management\\_Program.pdf](https://www.icphd.org/media/managed/environmentalhealth/Imperial_County_Local_Agency_Management_Program.pdf)

<sup>10</sup> [https://publicworks.imperialcounty.org/wp-content/uploads/2021/06/ICPMP\\_Final.web\\_.pdf](https://publicworks.imperialcounty.org/wp-content/uploads/2021/06/ICPMP_Final.web_.pdf) (Page 20)



Colonias, California Disadvantaged Communities, the results of this study can inform that process.

For many Colonias, as indicated in Tables 1 and 2 above, more than 50% of the population is economically burdened by housing costs, meaning over 30% of household income goes to this basic need. Many of the same communities have an extreme (>50%) burden, primarily in rents because home ownership is rare among the poorest families. Finally, many Colonias have high levels of another housing affordability indicator – overcrowding. For our assessment, Housing Affordability was deemed Critical if more than 50% of households were Burdened or Extremely Burdened, and/or more than 10% were Extremely Overcrowded.

The following sections detail individual Colonia needs by category. Individual Colonia Infrastructure Profiles document these needs in much greater detail.

## 6.1 Incorporated Areas

### ***Brawley***

- Street lighting (Improve)
- Pedestrian Network (Improve)
- Increased Paved Roads (Improve)
- Housing Affordability (Critical)
  - Significant and severe rent burden and overcrowding

### ***Calexico***

- Street lighting (Improve)
- Pedestrian Network (Improve)
- Increased Paved Roads (Improve)
- Housing Affordability (Critical)
  - Significant and severe rent burden and overcrowding

### ***El Centro***

- Street lighting (Improve)
- Pedestrian Network (Improve)
- Increased Paved Roads (Improve)
- Housing Affordability (Basic)
  - High levels of rent burden

### ***Imperial***

- Street lighting (Improve)
- Pedestrian Network (Improve)
- Increased Paved Roads (Improve)
- Housing Affordability (Critical)
  - Significant and severe rent burden and overcrowding

## **6.2 Unincorporated Areas**

### ***Bombay Beach***

- Treated Water (critical, but improvements in progress)
  - A new water treatment plant project began in 2019 and is scheduled to be completed by 2025.
  - A new water pump is also needed, currently in the design phase.
- Residential refuse collection (Critical)
  - No residential refuse collection is currently offered in Bombay Beach.
- Street lighting (Improve)
- Pedestrian Network (Improve)
- Increased Paved Roads (Improve)
- Housing Affordability (Critical)
  - Significant and severe rent burden and overcrowding

### ***Heber***

- Pedestrian Network (Basic)
  - The presence of a school in Heber implies the pedestrian network improvements are a more urgent piece of infrastructure.
- Treated water (Basic)
- Street lighting (Improve)
- Increased Paved Roads (Improve)
- Boundary delineation (basic for federal support)
  - Outdated Colonia boundaries include several new residential development that reflect highly different living conditions from the rest of the Colonia.
- Housing Affordability (Critical)
  - Significant and severe rent burden and overcrowding

### ***Niland***

- Pedestrian Network (critical for child safety)
  - The presence of a school in Niland implies the pedestrian network improvements are a more urgent piece of infrastructure.
- Post Office (Critical)
  - During community outreach in Niland residents expressed a strong local need for a post office.
- Residential refuse collection (Critical)
- Housing Affordability (Critical)  
Significant and severe rent burden and overcrowding
  - The Colonia does not have a franchise agreement with any provider and residential refuse collection is currently not affordable for many houses.
- Street lighting (Improve)
- More affordable residential housing (Basic)
- Increased Paved Roads (Improve)
- Clean up highway and road easements (Improve)
- Housing Affordability (Critical)  
Significant and severe rent burden and overcrowding

### ***Ocotillo***

- Treated Water (Critical)
  - Ocotillo receives water from a depleting resource and alternative provision of treated water should be identified.
- Wastewater (Critical)
  - Reliant on private septic tanks. Development of a wastewater treatment plant would be highly beneficial .
- Residential refuse collection (Critical)
  - The Colonia does not have a franchise agreement with any provider and residential refuse collection is currently not affordable for many residents.
- Public Transportation (Basic)
  - Ocotillo currently has limited public transportation options.
- Street lighting (Improve)
- Pedestrian Network (Improve)
- Increased Paved Roads (Critical)
  - Paved roads on Imperial Hwy and W Evan Hewes Hwy are in very poor condition such that residents cannot drive on certain parts and drivers go out of their way to avoid certain areas.

### ***Palo Verde***

- Wastewater (Critical)
  - Reliant on private septic tanks. The residents of Palo Verde have been working on a wastewater treatment plant since 2011. This is a high priority for the community.
- Treated Water (Basic)
  - Residents report issues with the chemical composition of the water and are seeking improvements.
- Public Transportation (Basic)
  - Palo Verde currently lacks public transportation.
- Street lighting (Improve)
- Pedestrian Network (Improve)
- Increased Paved Roads (Improve)
- Housing Affordability (Improve)

### ***Poe***

- Pedestrian Network (Basic)
  - Current circulation varies significantly in quality from street to street
- Increased Paved Roads (Basic)
  - Also significant variation within neighborhoods (both paved and unimproved/dirt/gravel)
- Street lighting (Improve)
  - Currently inconsistent coverage
- Housing Affordability (Critical)  
Significant and severe rent burden and overcrowding

### ***Salton Sea Beach***

- Treated Water (critical, but improvements in progress)
  - A new water treatment plant project began in 2019 and is scheduled to be completed by 2025.
  - A new water pump is also needed, but currently only in the design phase.
- Public Transportation (Basic)
  - Salton Sea Beach currently lacks public transportation.
- Street lighting (Improve)
- Pedestrian Network (Improve)
- Increased Paved Roads (Improve)
- Housing Affordability (Critical)

- Significant and severe rent burden and overcrowding

### ***Seeley***

- Treated Water (Critical)
  - The water treatment plant is failing, and rates are unable to cover the use or repairs.
- Wastewater (Critical)
  - The wastewater facility needs improvement.
- Residential refuse collection (Critical)
  - Residential refuse collection is available however it is currently not affordable for many houses and thus many individuals are forced to transport their trash to a local dump which requires a permit and has limited hours.
- Pedestrian Network (Basic)
  - The presence of a school in Seeley implies the pedestrian network improvements are a more urgent piece of infrastructure.
- Street lighting (Improve)
- Increased Paved Roads (Improve)
- Housing Affordability (Critical)  
Significant and severe rent burden and overcrowding

### ***Winterhaven***

- Treated Water (Critical)
  - The water treatment plant is failing, and rates are unable to cover the use or repairs.
- Wastewater (Critical)
  - The wastewater facility needs improvement.
- Street lighting (Improve)
- Pedestrian Network (Improve)
- Increased Paved Roads (Improve)
- Housing Affordability (Critical)  
Significant and severe rent burden and overcrowding