THE STATE OF TEXAS
CITY OF RIO HONDO
COUNTY OF CAMERON

Rick Tello, Commissioner Place 1
Margaret Perez, Mayor Pro-Tem
Joseph Lopez, Commissioner Place 5

Esteban Bocanegra, Place 2
Olga Gallegos, Commissioner Place 4

Gustavo Olivares
Mayor

Notice of a Regular Meeting of the City Commission of the City of Rio Hondo December 14, 2021

Pursuant to Chapter 551, Tittle 5 of the Texas Government Code, the Texas Open Meetings Act, notice is hereby given that the governing body of the City of Rio Hondo, Texas will convene for a **Regular Meeting at 6:00 p.m. on Tuesday December 14, 2021**, at the **City Commission Chambers** on the Second Floor of the Rio Hondo Municipal Building located at 121 N. Arroyo Blvd., Rio Hondo, Texas 78583.

****

PLEDGE OF ALLEGIANCE **UNITED STATES PLEDGE**

INVOCATION:

Regular Agenda:

1. Mayor's and Commissioner's Report
2. Administrator's Report
3. **Public Comment Period:** ***Please Note- The Public Comment Period is designated for hearing concerns regarding City of Rio Hondo Public Policy or City of Rio Hondo business that is or is not on the agenda or items listed on the agenda.***
4. Consideration and Action approving November 9, 2021, Minutes of the City Commission.
5. Discussion of setting policies for filming of movies in Rio Hondo.
6. Discussion of movie "Strings" to be filmed in Rio Hondo.
7. Review and Discussion of Rio Hondo 2012 -2032 Comprehensive Plan Central Business District Study and the Water/Sewer Distribution and Supply Study.
8. Set Economic Development Priorities for Central Business District and expansion priorities for the Water and Sewer distribution system.

9. Recess for dinner.

10. Adjournment

Note: The City Commission for the City of Rio Hondo reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any matters, as authorized by Texas Government Code Sections 551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices) and 551.086 (Economic Development).

Note: The Meeting is accessible to Americans with Disabilities. Persons with disabilities who plan to attend this meeting and who may need assistance, please call the City Secretary at (956) 748-2102, with at least twenty-four hours prior to the meeting.

Gustavo Olivares
Mayor of the City of Rio Hondo

POSTED

I, City Secretary for the City of Rio Hondo, do hereby certify that this Notice of Meeting is a true and correct record and was posted in the bulletin board outside City Hall, and the bulletin board in the City Hall lobby, at 121 N. Arroyo Blvd. Rio Hondo, Texas 78583 and remained so posted continuously for at least 72 hours preceding the scheduled time of said Meeting.

DATE: 12/10/2021 TIME: 3:00 PM

MINUTES FROM A REGULAR MEETING ON NOVEMBER 9, 2021

The Government Body of the City of Rio Hondo, Texas met in a Regular Meeting on November 9, 2021 at 6:30 pm in the Commission Chambers at City Hall, with Mayor- Gustavo Olivares Presiding- Present, Mayor Pro-Tem- Margaret Perez - Present and Commissioners, Rick Tello- Absent, Esteban Bocanegra- Present, Olga Gallegos- Present, and Joseph Lopez- Present.

PLEDGE OF ALLEGIANCE –Led by Mayor Olivares at 6:30 p.m.

INVOCATION: Given by Commissioner Margaret Perez

Regular Agenda:

1. Mayor's and Commissioner's Report – No reports were given.

2. Administrator's Report, Police, Library Report – Mayor noted for the parade to start early at 6pm on December 18, 2021. Commissioner Lopez noted the manhole on Arroyo and Mesquite is higher than the curb. Mr. Medina added the street may have been lowered. Mayor asked if the intersection was going to get an overlay or anything. Mr. Medina answered it might just be the width; will check on that. Mr. Medina noted about going for bids on 3 police cars with grant funding and 2 truck for the city. Mayor Olivares mentioned that it was good due to some city trucks needing to be updated.

3. **Public Comment Period:** ***Please Note- The Public Comment Period is designated for hearing concerns regarding City of Rio Hondo Public Policy or City of Rio Hondo business for both items not on the agenda and items listed on the agenda.*** **No public comments given.**

4. Consideration and Action approving the October 12, 2021, and October 28, 2021, Minutes of the City Commission. – Motion to approve both sets of minutes was made by Commissioner Margaret Perez. Was seconded by Commissioner Steve Bocanegra. Motion passed unanimously.

5. Third and Final Public Hearing Amending Ordinance 2021-12 Prohibiting Parking, Stopping and standing of vehicles to add the following: **"tractor trailers, utility trailers, farm tractors and farm equipment in residential areas and along and within 250 feet from Right-of-way OF Colorado Avenue from the Rio Hondo Lift Bridge to FM 345/Sam Houston Street."** – With the modification of excluding RVs in section 1; Motion to continue public hearing made by Commissioner Margaret Perez and seconded by Commissioner Olga Gallegos.

6. Consideration and Action on an Agreement entered into pursuant to Chapter 775 of the Texas Health & Safety Code, by and between the Cameron County Emergency Services District No. 1 and the City of Rio Hondo. – Chief Bilokury noted it is $109,046.31 in funds. He stated it has accumulated over 5 years. Money is a quarterly payment and is 2 years old (2 fiscal years back.) Motion to approve agreement was made by Commissioner Joseph Lopez and was seconded by Commissioner Steve Bocanegra. Motion passed unanimously.

7. Status on Mesquite Street reconstruction project. – Mr. Medina mentioned the painted will start next week. Caliche will be done either the 1st, 2nd, or 3rd week od December. The old caliche is at the sewer plant (alleyway will be fixed with it.)

8. Status on Bluebonnet Subdivision clean up. – Mr. Medina stated this is an opportunity to get rid of stuff you don't want.

9. Adjournment. --Motion to adjourn at 7:17pm was made by Commissioner Margaret Perez and seconded by Commissioner Olga Gallegos

Approved: _____ ----------

Gustavo Olivares, Mayor

Attest: Ben Medina

Strings Movie

#4

STRINGS a film by Rodrigo Moreno

Rio Hondo

December	Crew arrive	Location	End of the day	INTerior/EXterior
Wednesday 22nd	6:30 a.m.	**Rio Hondo Bridge**	8:50 a.m.	EXT
	9:00 a.m.	**Rio Hondo public BoatRamp**	11:00 a.m.	EXT.

Ben Medina

From: Rentrop Family <mariarentrop@gmail.com>
Sent: Thursday, December 9, 2021 11:42 AM
To: Ben Medina
Cc: Gustavo Olivares; rodrigo@pinkapemedia.com
Subject: Re: Location Inquiry
Attachments: Rio Hondo Production Schedule.pdf

Good morning Mr. Medina,

Attached you will find the production schedule. The date that we will be shooting in Rio Hondo is Wednesday, December 22nd. We will be shooting the first scene at the Rio Hondo Bridge from 6:30 a.m. - 8:50 a.m. and the second scene at the Rio Hondo Boat Ramp from 9:00 a.m. - 11:00 a.m. Please feel free to reach me at 956-577-2546. Thank you for your support Mr. Medina!

Thank you,
Maria Rentrop

Maria Rentrop

956-577-2546 mariarentrop@gmail.com

On Dec 8, 2021, at 2:24 PM, Rentrop Family <mariarentrop@gmail.com> wrote:

Good afternoon,

Yes sir. We will see you tomorrow morning at 9:00 a.m. Thank you so much for your time.

Thank you,
Maria Rentrop

<MariaSignature.png>

On Dec 8, 2021, at 1:31 PM, Ben Medina <bmedina@riohondo.us> wrote:

Yes that will good. I look forward to learning more about this project. Ben

From: Rentrop Family <mariarentrop@gmail.com>
Sent: Tuesday, December 7, 2021 7:13 PM
To: Ben Medina <bmedina@riohondo.us>
Cc: Gustavo Olivares <golivares@riohondo.us>; rodrigo@pinkapemedia.com
Subject: Re: Location Inquiry

Good evening Mr. Medina,

Thank you for your prompt response. Would Thursday, December 9th at 9:00 a.m. work with your availability? I am copying the Director, Mr. Rodrigo Moreno. We look forward to meeting with you!

Thank you,
Maria Rentrop

<image001.png>

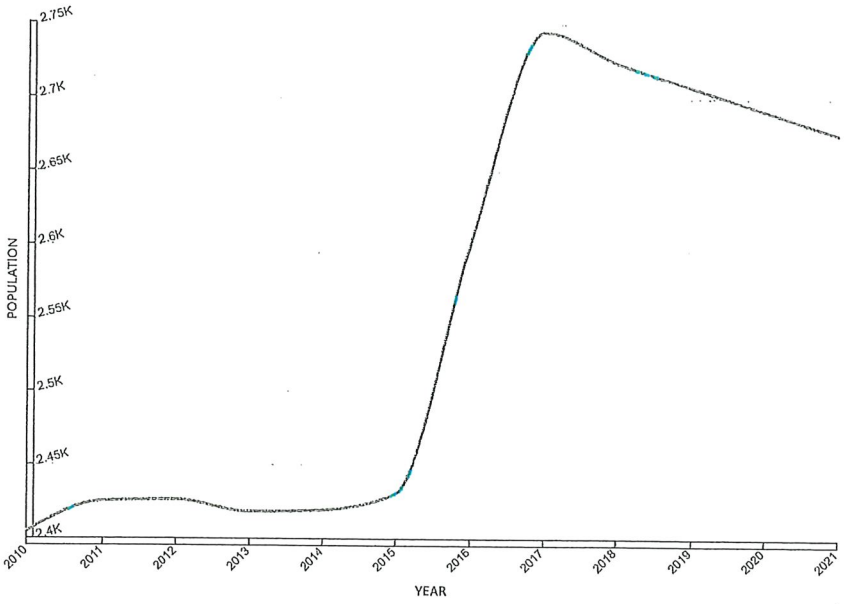
> On Dec 7, 2021, at 5:33 PM, Ben Medina <bmedina@riohondo.us> wrote:
>
> I am here Wed through Friday at any time. We do need to meet in person or zoom. Please let me know. Ben
>
> **From:** Rentrop Family <mariarentrop@gmail.com>
> **Sent:** Tuesday, December 7, 2021 3:44 PM
> **To:** Ben Medina <bmedina@riohondo.us>
> **Subject:** Location Inquiry
>
> Good afternoon Mr. Medina,
>
> I spoke with you earlier today. My name is Maria Rentrop. Attached is the film application submitted to the Brownsville Border Film Commission. The production is looking to shoot one scene at the Historic Arroyo Colorado Lift Bridge on Wednesday, December 22nd and/or Thursday, December 23rd, 2021. The scene would take approximately 3-4 hours. If you are available this week I can set up a time to meet with you to discuss more about this short film!
>
> Thank you,
> Maria Rentrop
>
> <image001.png>

Census Data 2020

Show Sources

Rio Hondo, Texas Population 2021

2,675



Rio Hondo is a city located in Cameron County Texas. With a 2020 population of 2,675, it is the 518th largest city in Texas and the 6613th largest city in the United States . Rio Hondo is currently declining at a rate of -0.59% annually but its population has increased by 13.54% since the most recent census, which recorded a population of 2,356 in 2010. Rio Hondo reached it's highest population of in . Spanning over 2 miles, Rio Hondo has a population density of 1,586 people per square mile.

The average household income in Rio Hondo is $46,759 with a poverty rate of 28.83%. The median rental costs in recent years comes to $664 per month, and the median house value is $69,500. The median age in Rio Hondo is 42.9 years, 42.7 years for males, and 43.3 years for females.

State	Texas
County	Cameron County
Land Area (mi²)	1.7 sq mi
Density (mi²)	1,586.10/sq mi
2020 Growth Rate	-0.59% (-16)
Growth Since 2010	13.54% (319)
Rank in State	518th
Rank in Country	6613th

The current population of Rio Hondo, Texas is 2,675 based on our projections of the latest US Census estimates. The US Census estimates the 2018 population at 2,707.The last official US Census in

Rio Hondo Demographics

According to the most recent ACS, the racial composition of Rio Hondowas:

- Black or African American: 0.00%
- Asian: 0.00%
- Native Hawaiian or Pacific Islander: 0.00%
- Two or more races: 0.00%

Rio Hondo Population by Race

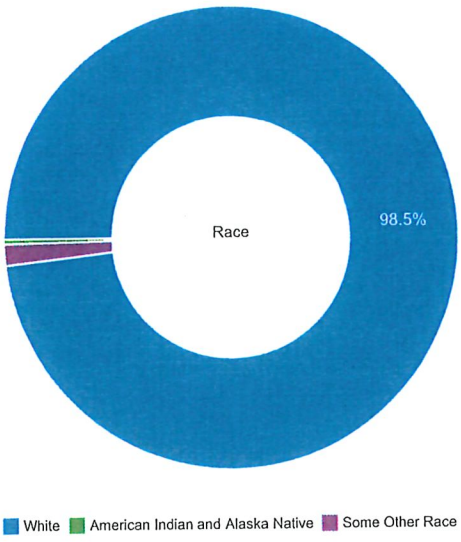
Show Source

Population by Race

Total | Hispanic | Non-Hispanic

CSV JSON

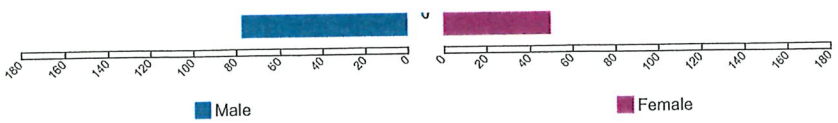
Race	Population	Percentage
White	2,600	98.48%
Some Other Race	35	1.33%
American Indian and Alaska Native	5	0.19%



Rio Hondo Population by Age

Show Source

Rio Hondo Population Pyramid $2021



Rio Hondo Median Age

Total	Male	Female
42.9	42.7	43.3

Rio Hondo Adults

There are 1,938 adults, (617 of whom are seniors) in Rio Hondo.

Rio Hondo Age Dependency

99.8
Age Dependency Ratio

46.7
Old Age Dependency Ratio

53.1
Child Dependency Ratio

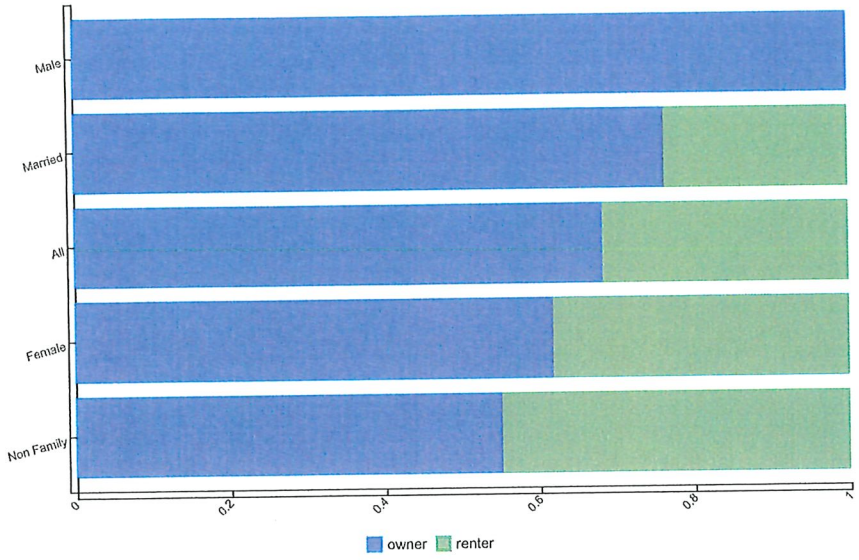
Rio Hondo Sex Ratio

Female	1,529	57.92%
Male	1,111	42.08%

Rio Hondo Households and Families

Show Source

Rio Hondo Renter vs Owner Occupied by Household Type



Rio Hondo Household Types

CSV JSON

Type	Owner ▲	Renter
Non Family	55.1%	44.9%
Female	61.8%	38.2%
All	68.3%	31.7%
Married	76.3%	23.7%
Male	100%	0%

68.3%
Rate of Home Ownership

Rio Hondo Households by Type

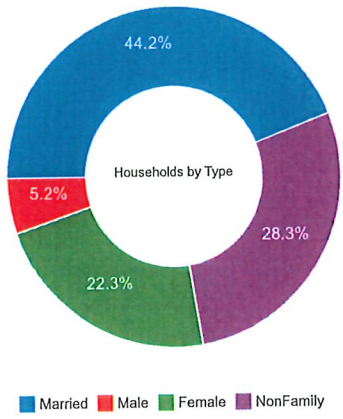
Show Source

CSV JSON

Type	Count ▼	Average Size	Owned
All	928	2.84	68.3
Married	410	3.32	76.3
Non Family	263	1.2	55.1
Female	207	3.93	61.8
Male	48	3.1	100

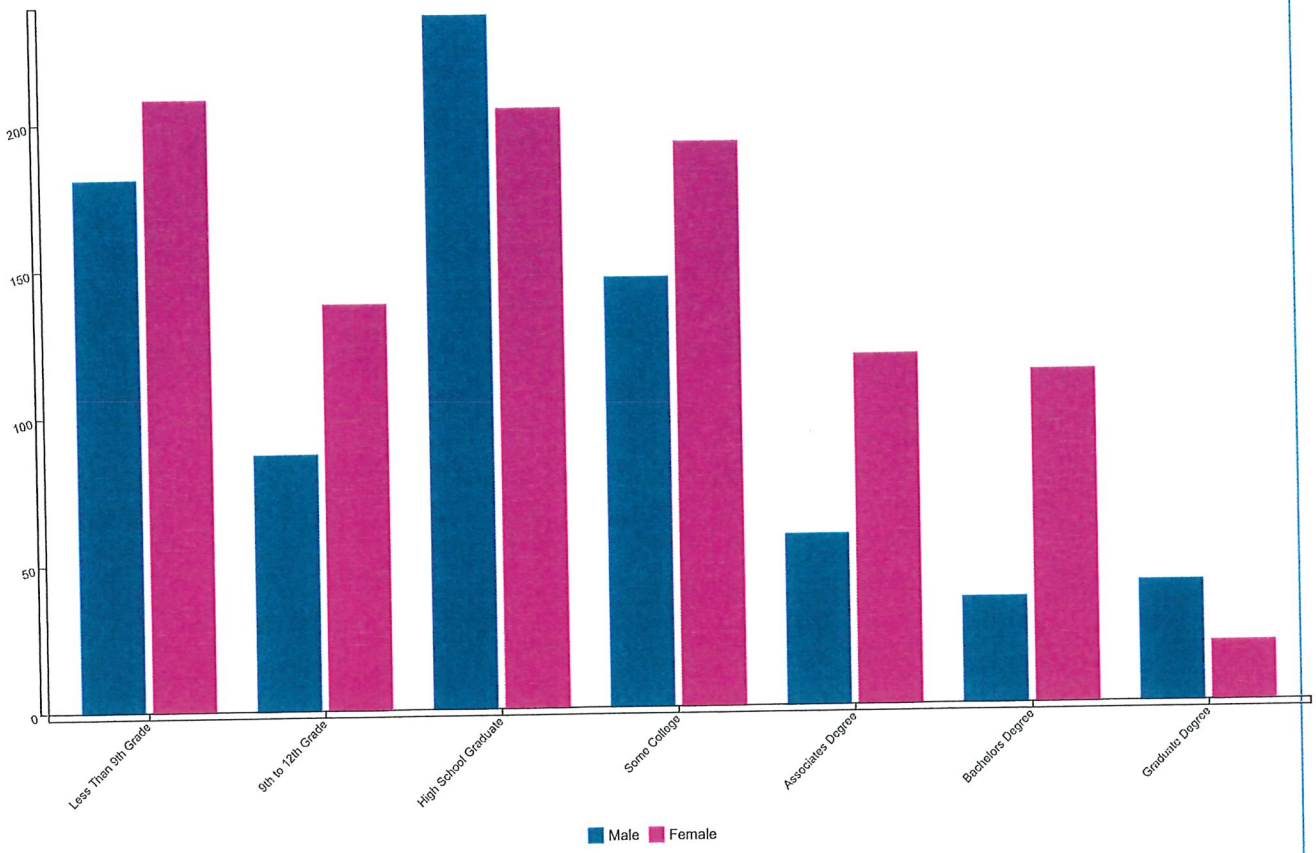
3.45
Average Family Size

2.84
Average Household Size



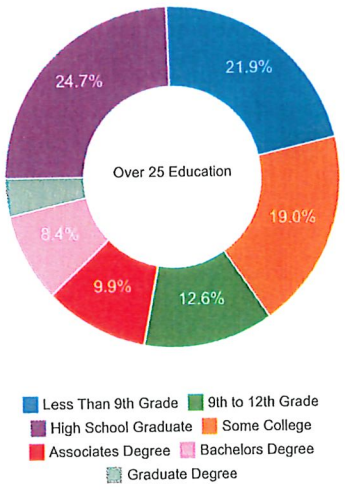
Rio Hondo Educational Attainment by Sex (over 25)

Show Source



CSV JSON

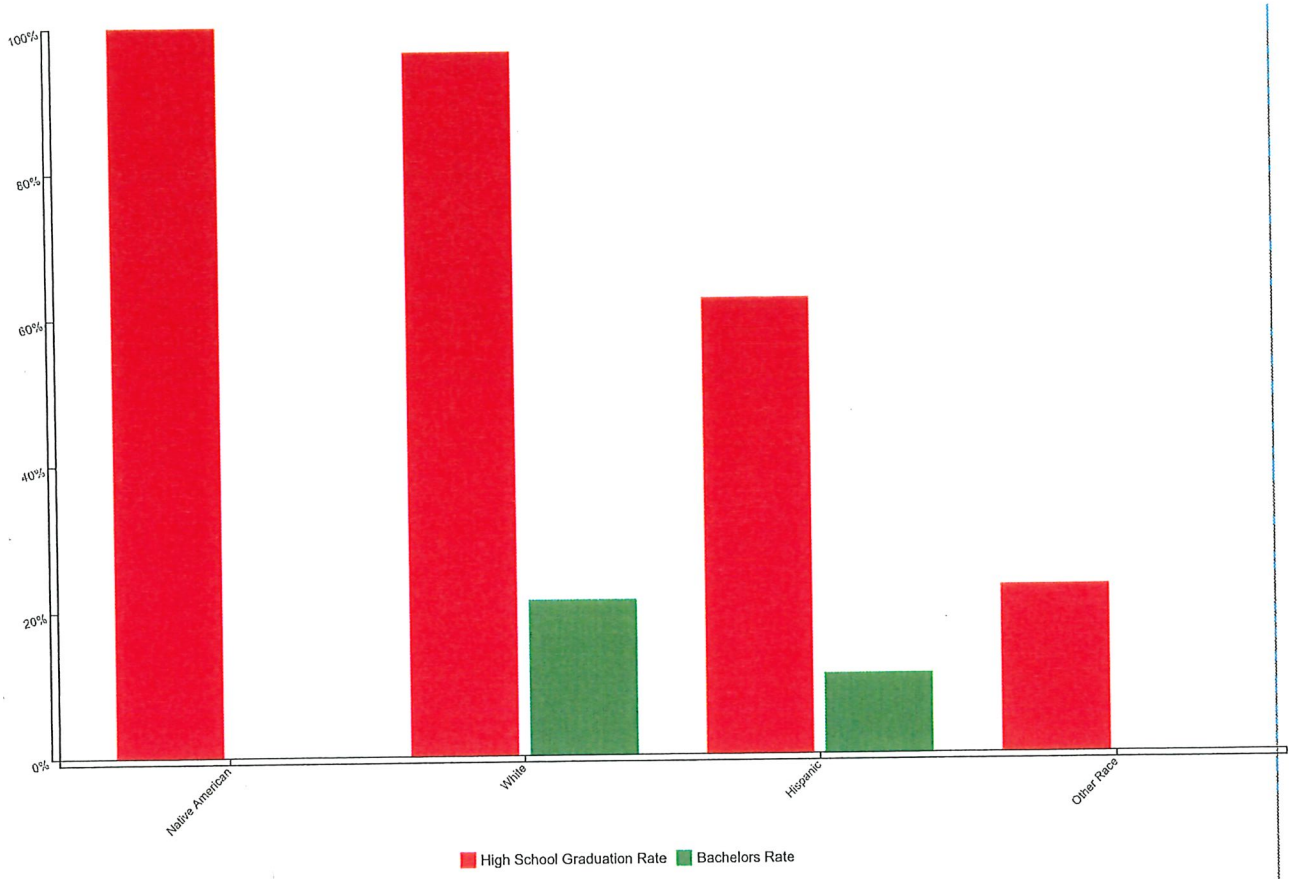
Education Attained	Count	Percentage
Less Than 9th Grade	389	21.87%
9th to 12th Grade	225	12.65%
High School Graduate	440	24.73%
Some College	338	19.00%
Associates Degree	177	9.95%
Bachelors Degree	149	8.38%
Graduate Degree	61	3.43%



Show Source

Rio Hondo Educational Attainment by Race

Rio Hondo Educational Attainment by Race | Percentage | Count



CSV JSON

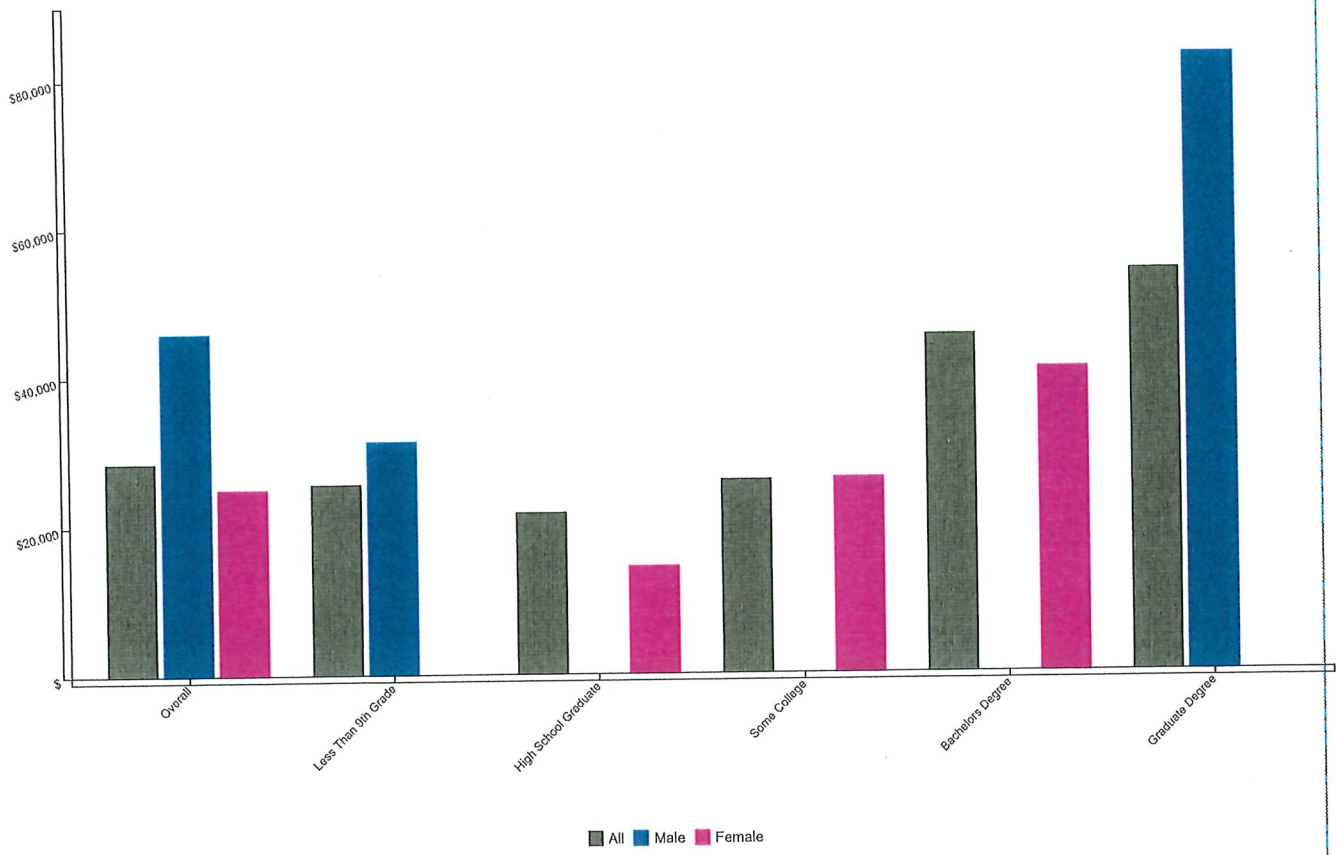
Race	Total	High School	Bachelors
Hispanic	1,614	1,006	175
White	165	159	35
Other Race	35	8	
Native American	5	5	

The highest rate of high school graduation is among native american people with a rate of 100.00%.

The highest rate of bachelors degrees is among white people with a rate of 21.21%.

Rio Hondo Earnings by Educational Attainment

Show Source



CSV JSON

Name	Average	Male	Female
Overall	$28,542	$45,903	$25,000
Less Than 9th Grade	$25,625	$31,346	$
High School Graduate	$21,750	$	$14,500
Some College	$26,034	$	$26,250
Bachelors Degree	$45,347	$	$40,833
Graduate Degree	$53,977	$82,917	$

$28,542
Average Earnings

$45,903
Average Male

$25,000
Average Female

Rio Hondo Language

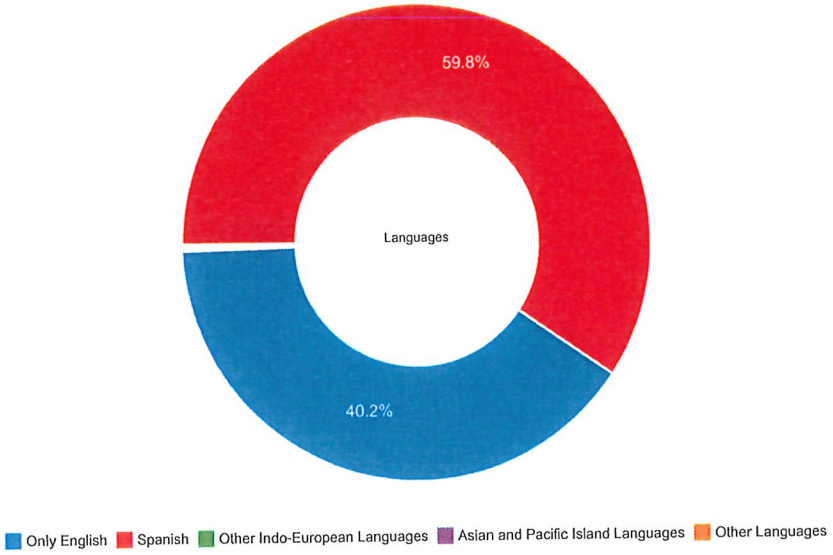
Show Source

Rio Hondo Language by Age

All Ages | 5-17 | 18-64 | 65+

Rio Hondo Language

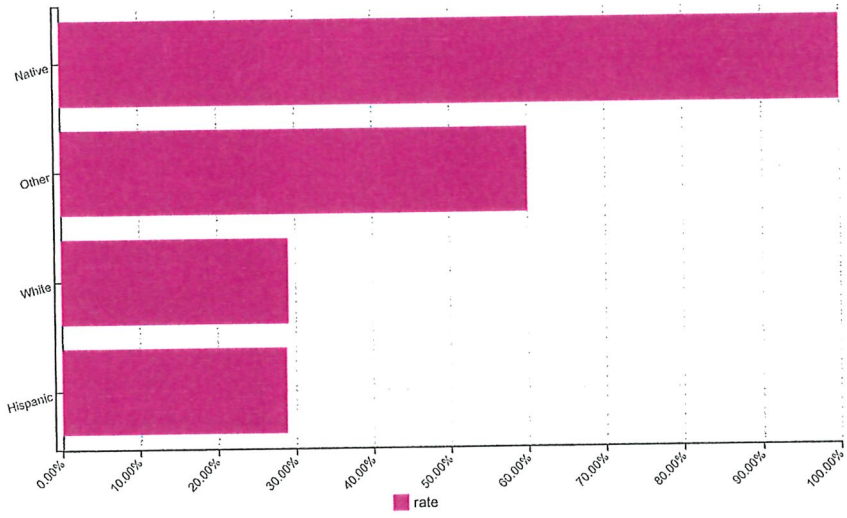
40.23% of Rio Hondo residents speak only English, while 59.77% speak other languages. The non-English language spoken by the largest group is Spanish, which is spoken by 59.77% of the population.



Rio Hondo Poverty

Show Source

Rio Hondo Poverty by Race



CSV JSON

Name	Total	In Poverty	Poverty Rate
Hispanic	2,468	711	28.81%
White	172	50	29.07%
Other	35	21	60.00%
Native	5	5	100.00%

28.83%
Overall Poverty Rate

28.35%
Male Poverty Rate

29.17%
Female Poverty Rate

Poverty in Rio Hondo

The race most likely to be in poverty in Rio Hondo is Native, with 100.00% below the poverty level.

The race least likely to be in poverty in Rio Hondo is Hispanic, with 28.81% below the poverty level.

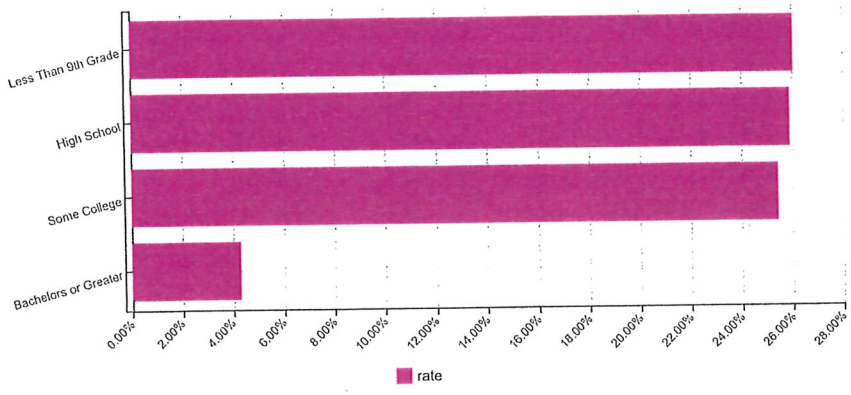
The poverty rate among those that worked full-time for the past 12 months was 10.01%. Among those working part-time, it was 45.85%, and for those that did not work, the poverty rate was 30.13%.

Rio Hondo Poverty Rate by Education

Show Source

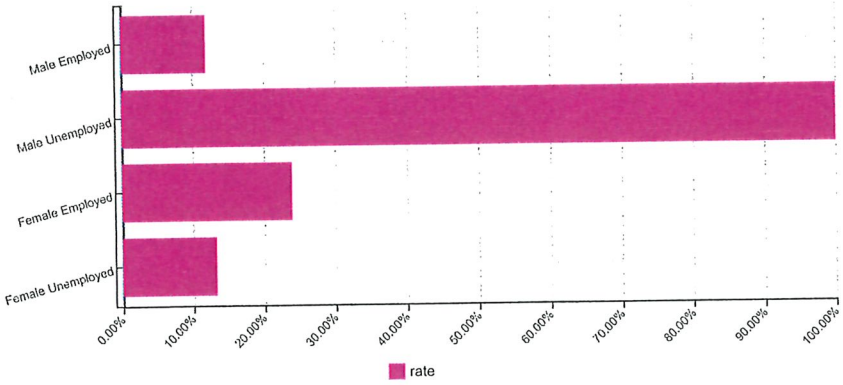
CSV JSON

Name	Poverty
Less Than 9th Grade	26.06%
High School	25.91%
Some College	25.44%
Bachelors or Greater	4.29%



Rio Hondo Poverty Rate by Employment Status and Sex

Show Source



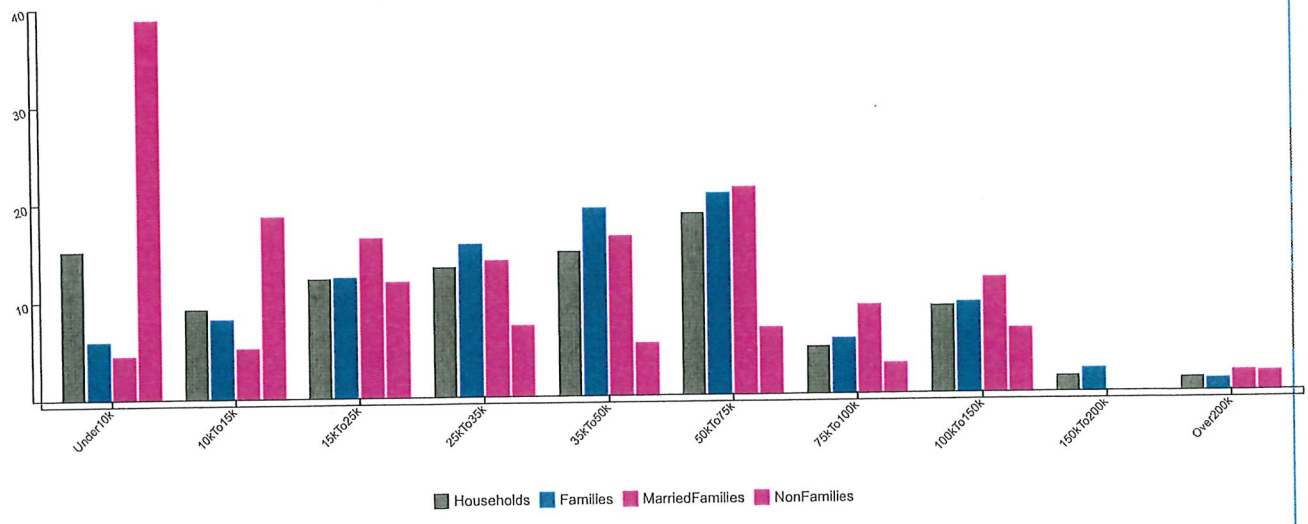
CSV JSON

Rate	Poverty
Male Unemployed	100.00%
Female Employed	23.82%
Female Unemployed	13.16%
Male Employed	11.89%

Income by Household Type

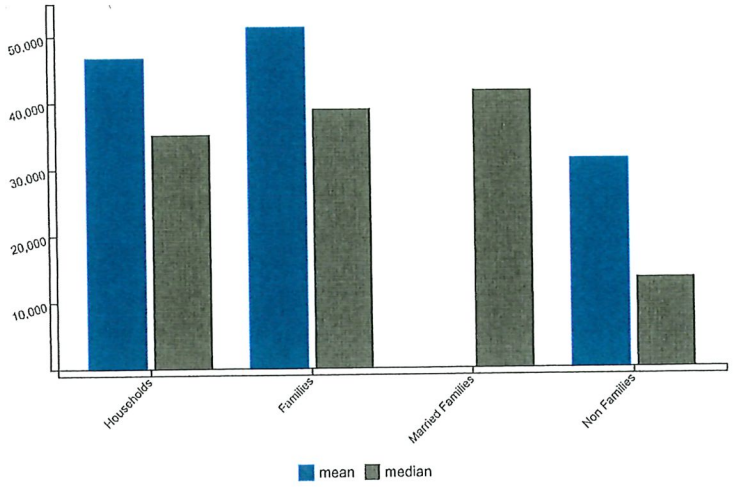
Show Source

Rio Hondo Income by Household Type



CSV JSON

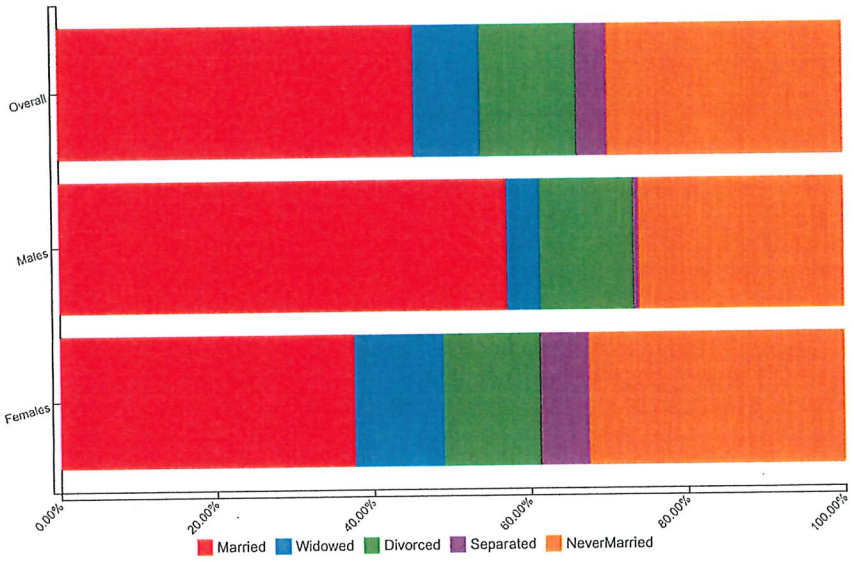
Name	Median	Mean
Households	$35,143	$46,759
Families	$38,945	$51,298
Married Families	$41,667	-
Non Families	$13,427	$31,371



Rio Hondo Marital Status

Show Source

Rio Hondo Marital Status



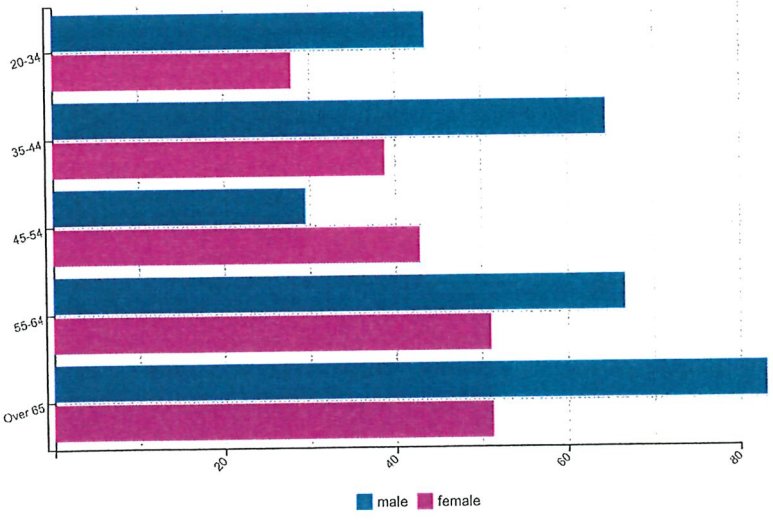
Marriage Rates

45.5%
Overall Marriage Rate

57.2%
Male Marriage Rate

37.6%
Female Marriage Rate

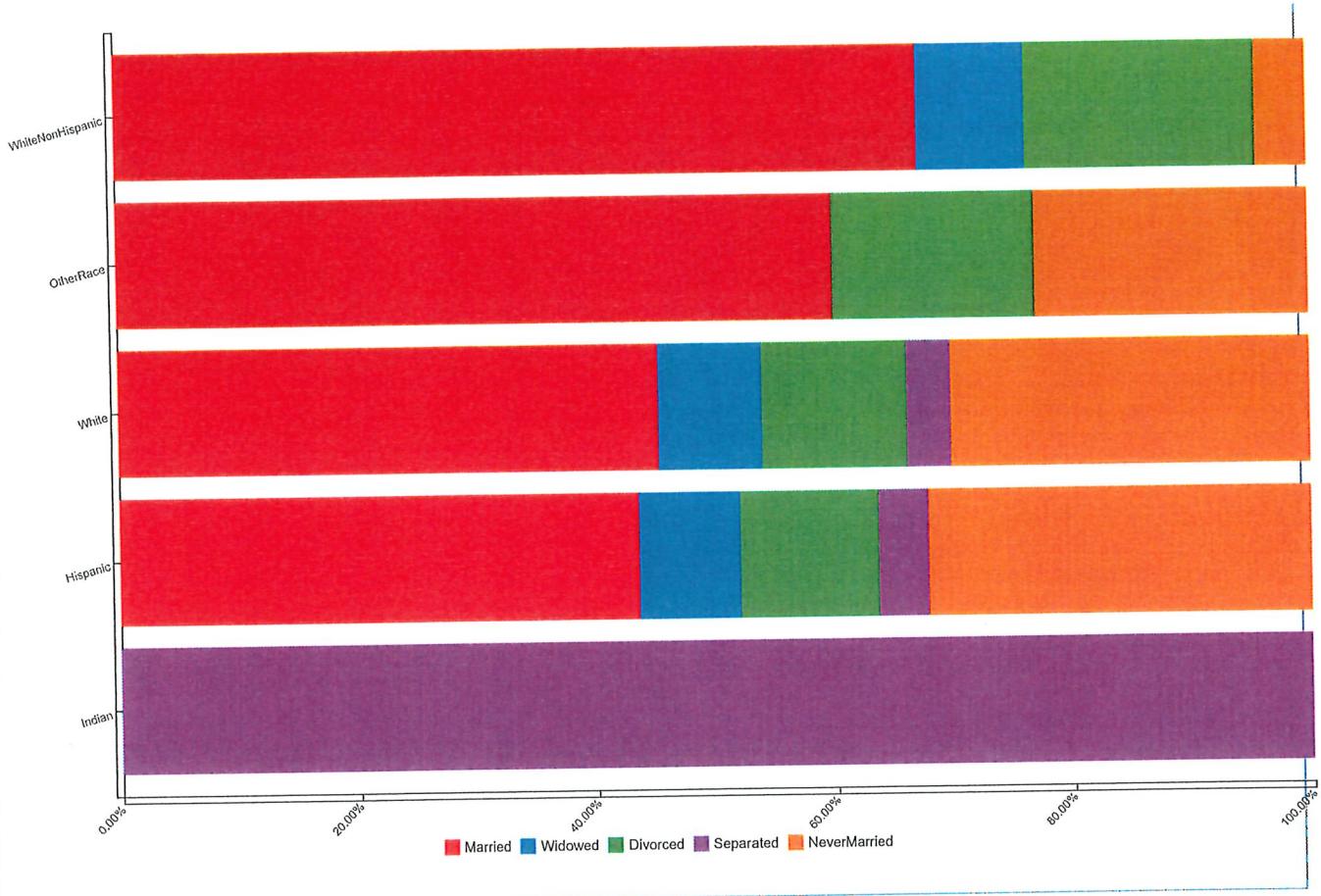
Rio Hondo Married by Age and Sex



Rio Hondo Marriage

The age group where males are most likely to be married is Over 65, while the female age group most likely to be married is Over 65.

Rio Hondo Marital Status by Race



Rio Hondo Veterans by War

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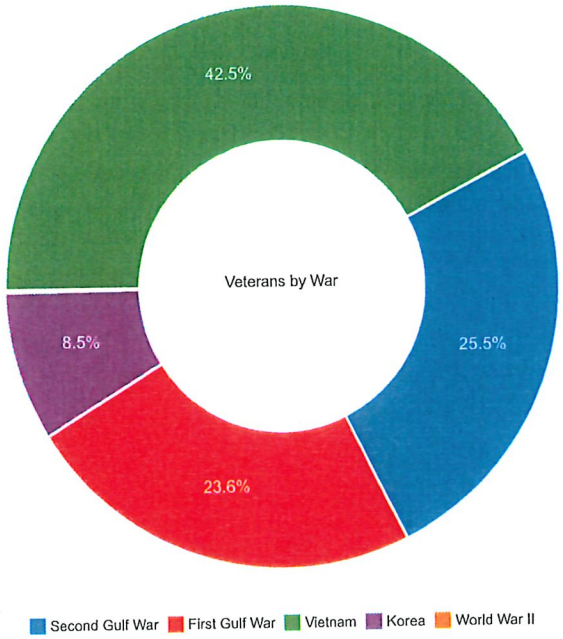


116
Number of Veterans

116
Male Veterans

Female Veterans

CSV JSON

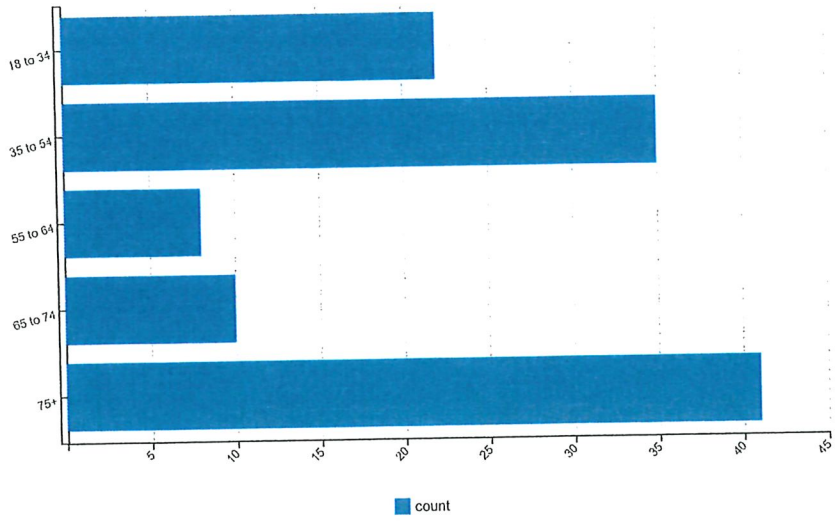
War	Veterans
Vietnam	45
Second Gulf War	27
First Gulf War	25
Korea	9
World War II	

Rio Hondo Veterans by Age

Show Source

CSV JSON

Age Group	Veterans
75+	41
35 to 54	35
18 to 34	22



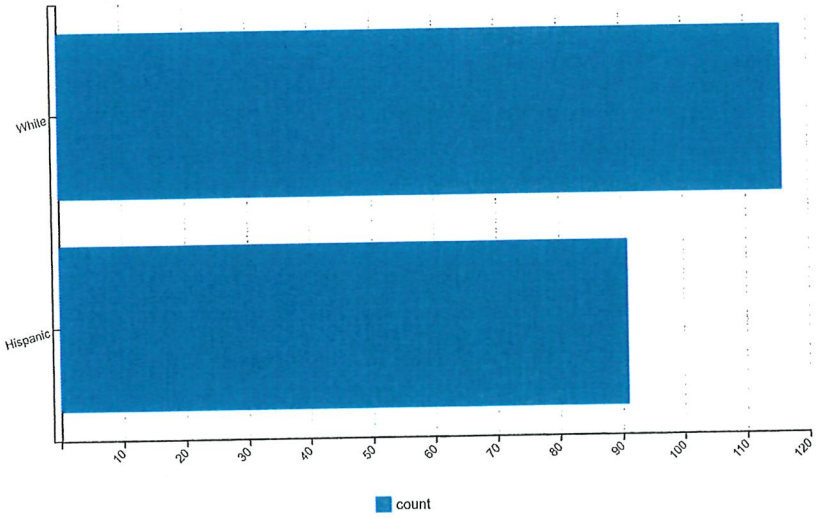
Age Group	Veterans
65 to 74	10
55 to 64	8

Show Source

Rio Hondo Veterans by Race

CSV JSON

Percentage | Counts



Name	Veterans	% of Total
White	116	6.11%
Hispanic	91	5.13%

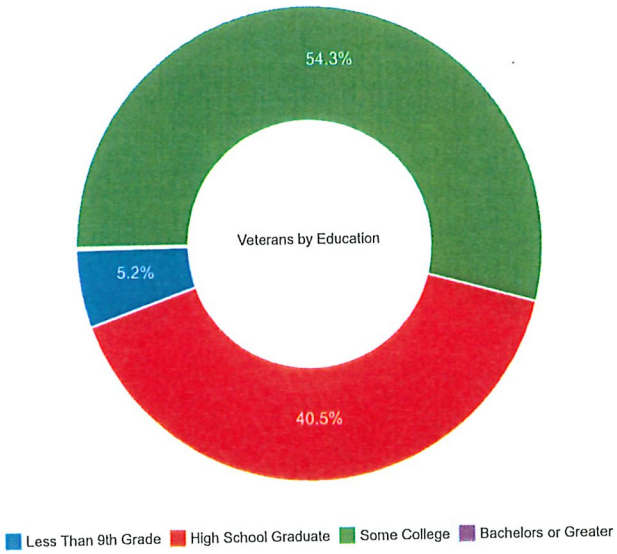
Show Source

Rio Hondo Veterans by Education

Rio Hondo Veterans by Education

30.17%
Veteran Poverty Rate

20.69%
Veteran Disability Rate



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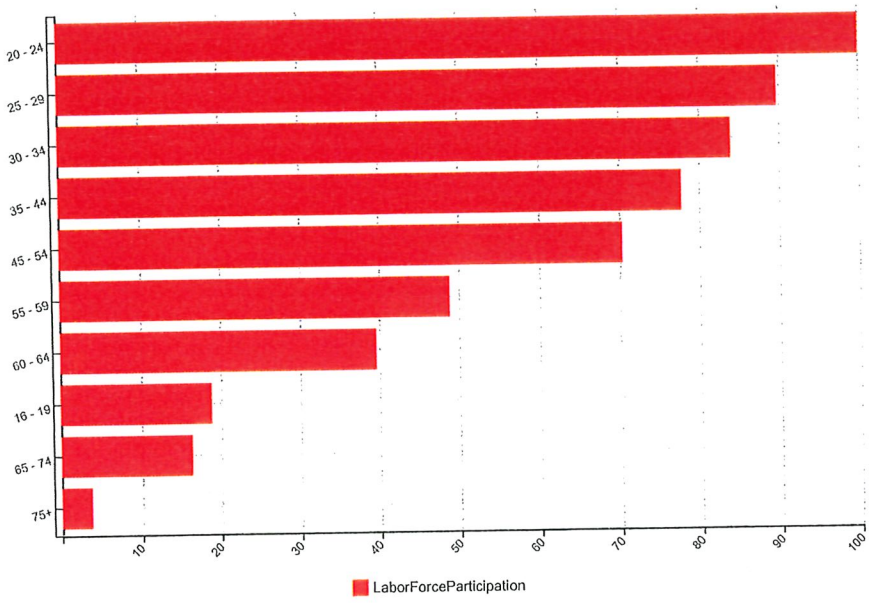
Rio Hondo Employment by Age

Labor Force Participation | Employment Rate | Unemployment Rate



48.9%
Labor Force Participation

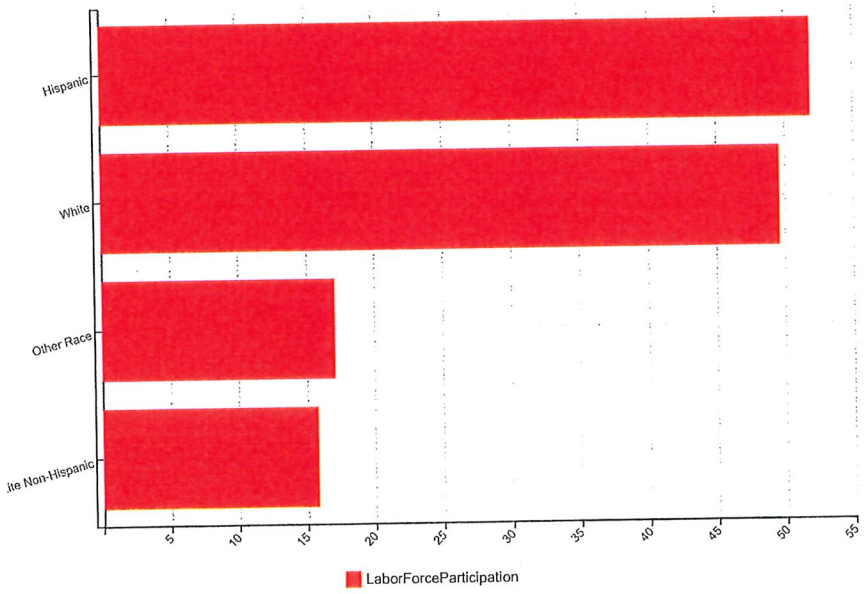
46.8%
Employment Rate

4.3%
Unemployment Rate

Show Source

Rio Hondo Employment by Race

Labor Force Participation | Employment Rate | Unemployment Rate



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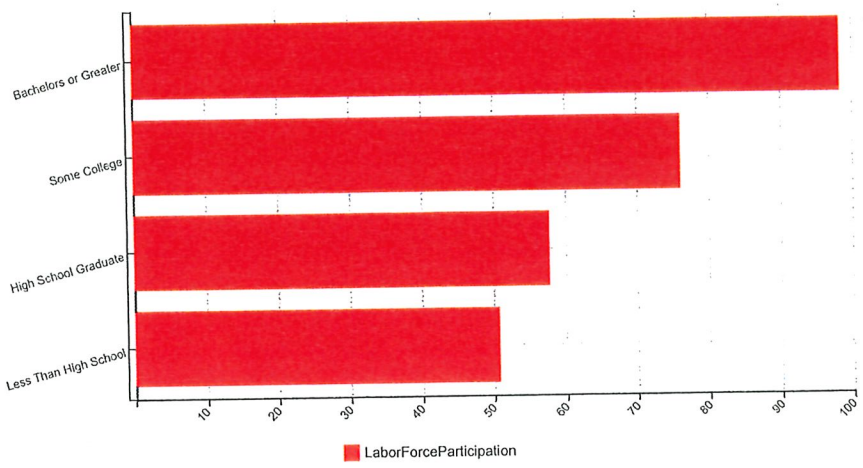
Rio Hondo Employment by Education

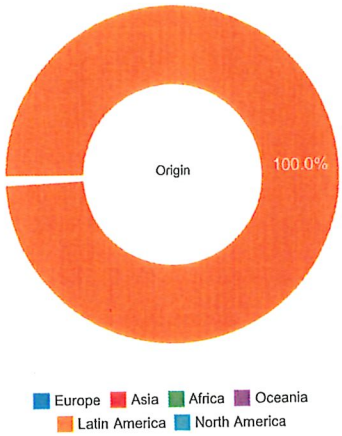
Labor Force Participation | Employment Rate | Unemployment Rate



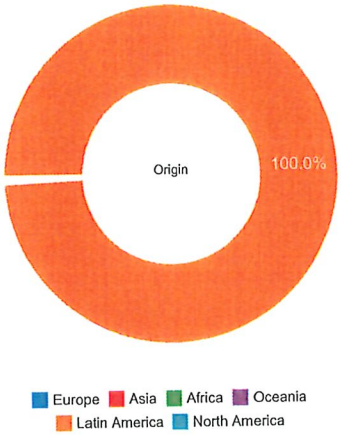
Rio Hondo Place of Birth

Show Source

Origin of Non-Citizens



Origin of Naturalized Citizens



75.53%
Born in Rio Hondo

89.62%
Native Born

10.38%
Foreign Born

4.85%
Non Citizen

5.53%
Naturalized

Non citizens include legal permanent residents (green card holders), international students, temporary workers, humanitarian migrants, and illegal immigrants.

Place of Birth

89.62% of Rio Hondo residents were born in the United States, with 75.53% having been born in Texas. 4.85% of residents are not US citizens. Of those not born in the United States, the largest percentage are from Latin America.

Rio Hondo Population by Year

Note: 2020 and 2021 data is projected

CSV JSON

Year	Population	Growth	Annual Growth Rate
2021	2,675	-16	-0.59%
2020	2,691	-16	-0.59%
2019	2,707	-16	-0.59%

Year	Population	Growth	Annual Growth Rate
2018	2,723	-21	-0.77%
2017	2,744	144	5.54%
2016	2,600	170	7.00%
2015	2,430	11	0.45%
2014	2,419	1	0.04%
2013	2,418	-8	-0.33%
2012	2,426	1	0.04%
2011	2,425	21	0.87%
2010	2,404		0.00%

Central Business District Study

when funding for this program will be available. More information can be obtained on this program at

http://www.preservationnation.org/issues/transportation/additional-resources/building-on-the-past.pdf

Small Business Development Center, UT Pan American. This office, funded through the US Small Business Administration, counsels area residents in starting small businesses. They assist clients with developing business plans and applying for bank loans. Specific programs assist minority and women with establishing new businesses and may be able to assist them with plans for building acquisition and/or rehabilitation.

12.4 Central Business District Plan

Goals and Objectives for Downtown Rio Hondo: The challenge during the planning period for Rio Hondo will be to maintain the CBD as a distinct area of town. Because no regulations are in place, an old building could be torn down to make way for new buildings that will not replicate the downtown feel created by buildings that line the street; large transparent windows that face the street; and parking channeled behind buildings instead of in front of buildings. In order to maintain and improve the CBD, the plan establishes the following Goals with objectives for meeting them. Capital improvements and increased organizational capacity can be funded for about $650,000.

Goal 1: Colorado Avenue between the Arroyo and Robertson Street is the City's main business thoroughfare. Businesses succeed there and provide basic services and entertainment for residents and visitors.

Objective 1.1: Develop a Rio Hondo "brand" by 2013.

Policy 1.1.1: MDD appoint a Promotions committee to begin developing a theme for the City to be highlighted in the CBD, the City's main thoroughfare. Enlist the assistance of the area university business schools, if needed. In addition, ask for input through newspaper articles, websites, or holding a contest.

Policy 1.1.2: Throughout the planning period, ensure that the brand is "deliverable," don't' make promises in signs or advertising that can't

be kept. The intention is to deliver what is expected so as not to lose trust in residents, tourists, and other consumers. Also select a narrow focus. (In *BoomTown USA,* author Jack Schultz, encourages towns to grow their vision/brand "deeper, not wider.")

Policy 1.1.3: Promote the brand. See Objective 2.6 in Chapter 11 for steps.

Policy 1.1.4: Hire or solicit the help of high school students and/or other youth organizations by 2014 for downtown decoration projects such as mini-murals, a stand with a map for tourists, and benches and garbage bins painted with local themes.

Policy 1.1.5: By 2016, use the brand in every point of contact with visitors, including a dedicated website on directional, street, and welcome signs placed throughout the planning period and other tourism and city materials.

Objective 1.2: By 2020 increase the amount of sales and visitors to the CBD as measured by at least a 30% increase in sales tax revenue generated by the CBD.

Policy 1.2.1: Beginning in 2012, MDD complete surveys of business owners, tourists and residents about what they would like to buy in Rio Hondo. Post the results on the city websites on a business page. In addition, list property for sale or lease on the website.

Policy 1.2.2: Throughout the planning period, EDC continue providing to businesses small grants to assist with exterior building appearance, lighting, awnings.

Policy 1.2.3; By 2012, move and expand the City's historical exhibit to a downtown building or a window front in a downtown building to attract passersby and visitors.

Policy 1.2.3: By 2013, MDD and EDC determine how to fund the addition of amenities in the CBD like benches, planters and trash receptacles. This effort could include donation of amenities created by students or artists.

Policy 1.2.4: By 2015, upgrade the east and west gateways into the CBD by developing at least one of the following: landscape and/or "Welcome to Rio Hondo" monuments that frame both the east and west entrances; a scenic overlook on the east side of the Arroyo in City Park that draws attention from the draw bridge and gives visitors and residents a scenic overlook of the Arroyo; and/or placement of a mural on the west or south facing City Hall walls that can be seen from FM 106.

Policy 1.2.5: Once the downtown has new amenities by 2016, gain regional and national exposure for Rio Hondo businesses by the City joining the Harlingen Area Chamber of Commerce, the Rio

South Texas Economic Council, and the GO TEXAN Rural Communities program.

Objective 1.3: Rehabilitate the east end of the CBD by 2018.

Policy 1.3.1: By 2012, create a plan to increase parking in the eastern portion of the CBD. Suggestions include creating a parking lot/ mini-park at the southwest corner of Heywood and Colorado Ave. Alternatively, assist proprietors with creating parking behind buildings adjacent to alleys between Robertson and Heywood.

Policy 1.3.2: By 2013, MDD or other city or regional entity establish a revolving loan fund, tax abatement or other funding mechanism to provide incentives for property owners to rehabilitate original downtown buildings and make them more marketable for sale or lease.

Policy 1.3.3: By 2013, adopt zoning that establishes specific regulations for downtown development and re-development, including provisions for placing buildings near the street, parking in the rear of buildings, percentages of street facing facades that must be doors and windows, and allowance of mixed use buildings to encourage residents to live downtown.

Policy 1.3.4: By 2014, post all of the city's ordinances related to building on the City's website on a special page called "Doing Business in Rio Hondo." This will enable prospective business owners to research business and development questions in Rio Hondo easier.

Policy 1.3.5: By 2015, adopt a central business district design ordinance that specifies regulations for awnings and signs.

Policy 1.3.6: By 2016, with a dedicated funding source to provide matching funds and in cooperation with the TXDOT San Benito office, apply for a TCF Downtown Redevelopment grant or a TXDOT STP grant to upgrade existing sidewalks.

Policy 1.3.7: By 2018, re-pave and widen the pavement in the alleys and adopt ordinances that make the alleys one-way. Also, add decorative lighting.

Objective 1.4: Rehabilitate the west end of the CBD by 2030 and create a gateway into Rio Hondo.

Policy 1.4.1: By 2015, create a scenic overlook in City Park that gives visitors and residents a view of the river and enhances the view visitors receive as they enter downtown from the lift-span bridge.

Policy 1.4.2: By 2016, extend park facilities to City Park open space that fronts FM 106 just south of the Fire Department. Facilities should be seen from the street, including a gazebo or other

structures. Alternatively, paint a mural on the back of City Hall that adds color and provides a welcome sign to visitors as they enter the City.

Policy 1.4.3: By 2017, add gateway signs to the east and west borders of the CBD, including landscaping or changing the fence around the Twin Palms RV Park to allow for freer pedestrian movement into the CBD.

Policy 1.4.4: By 2023, extend sidewalks through the western end of the CBD, upgrade existing sidewalks, add decorative lighting and standardize ADA ramps.

Policy 1.4.5: Throughout the planning period, market the land south of the lift span bridge on the east side of the Arroyo as an opportunity for a mixed-use development to upgrade affordable housing in the downtown and restaurant or retail offerings at the foot of the lift-span bridge.

Goal 2: The CBD is a place that joins Rio Hondo north and south neighborhoods and provides an area for residents and visitors of all ages to gather.

Objective 2.1: Develop a complete sidewalk system with intermittent shade in the CBD to encourage strolling and pedestrian use of the CBD. Pedestrians attract passersby and can be used by residents and visitors of all ages.

Policy 2.1.1: Between 2012 and 2014, MDD develop a financing plan in conjunction with TXDOT, energy providers and the Texas Agriculture Extension Office to upgrade sidewalks in east Rio Hondo. A project should include adding thematic street lighting to the western end of downtown.

Policy 2.1.2: By 2015, begin rehabilitating east end sidewalks and adding amenities through a combination of grants, city funds or bonds. Amenities should include lighting that sets a style for downtown lighting and lengthens a CBD's visitor stay into the evening hours.

Policy 2.1.3: Between 2014 and 2020, City officials ensure that standard ADA ramps are placed at intersections as buildings are developed on corners. Work with TXDOT throughout the planning period to encourage them to update and place new standard ADA ramps at intersections along FM 106 in the CBD.

Policy 2.1.4: By 2013, adopt subdivision regulations requiring sidewalks on developments that front FM 106 or share a lot line with properties that front the CBD.

Policy 2.1.5: By 2013, adopt zoning regulation amendments that bring buildings to the front of lots facing FM 106 in the CBD; require

parking or shared parking; and define where parking should be located on a lot that fronts FM 106.

Policy 2.1.6: Between 2016 and 2020, MDD work with any developers of new buildings and/or current property owners west of Reynolds to place sidewalks along FM 106 in property area next to sidewalk where advisable. Also, budget or work with TXDOT to place a sidewalk on City Hall property 165 feet from Arroyo Street west to join TXDOT sidewalk that leads to the lift-span bridge.

Policy 2.1.7: During the planning period, provide grants to property owners to place trees within 20 feet of the right of way with FM 106 in the blocks between Arroyo and Reynolds and between Harrolds and Robertson. In addition work with the Cameron County Master Gardeners Association to plant trees in the CBD.

Objective 2.2: Encourage businesses to develop parking lots behind their buildings and channel destination traffic down the alleys to make it easier for automobile traffic to negotiate the CBD and choose it for shopping, services and eating.

Policy 2.2.1: By 2014, City Council adopt ordinances making alleys one-half block north of FM 106 and one-half south of FM 106 one-way to encourage the back of lots to be used for parking.

Policy 2.2.2: By 2014, adopt zoning regulations that require screening between commercial and residential uses.

Policy 2.2.3: By 2014, adopt zoning regulations that bring buildings to the front of lots facing FM 106 in the CBD; require parking or shared parking; and define where parking should be located on a lot that fronts FM 106.

Policy 2.2.4: Between 2012 and 2020, Downtown Committee work with property owners to widen and/or improve the alleys between Paloma and Bristol in the CBD. Improvements would include the addition of lighting that is sensitive to neighboring residences, paving, screening between the alley and residences, rear parking for cars and bikes, and signage needed to direct traffic to the alleys for parking.

Objective 2.3: Encourage the development in the CBD of amenities that will draw residents and tourists to the CBD.

Policy 2.3.1: Between 2012 and 2020, MDD, EDC and City officials market west end downtown property by the lift-span bridge to create a focal point for downtown and entry into the City. This includes adopting zoning that will allow for a mix of uses to be developed on the lots.

Policy 2.3.2: Between 2013 and 2015, expand City Park next to City Hall so that amenities front FM 106. Examples of amenities

include gazebos, fencing that allows for a view into the park and views of the Arroyo, or other structures that attract attention to the open space south of the Fire Department.

Policy 2.3.3: By 2012, determine if the City could purchase land for a park/parking lot along Colorado Avenue to alleviate a lack of parking in the eastern part of the CBD. If the purchase is made, develop the land by 2014 possibly as a pocket park/parking lot. TDA Downtown Revitalization funds could provide some of the construction or acquisition funding.

Policy 2.3.4: Between 2012 and 2016, City consider leasing land on vacant lots between Reynolds and Robertson to launch a community garden that gets residents accustomed to coming downtown for recreation and gathering. Alternatively, City assist restaurants or other business owners to place a garden on empty lots for their use until the real estate can be developed.

Policy 2.3.5: By 2014, adopt subdivision and zoning regulations that require landscaping for new subdivisions and the depiction of existing trees in site plans so that developers and officials are aware of the impact development will have on trees and shade in the CBD.

Policy 2.3.6: By 2015, begin rehabilitating east end sidewalks and adding amenities through a combination of grants, city funds or bonds. Amenities should include lighting that sets a style for downtown lighting and lengthens a CBD's visitor stay into the evening hours.

Policy 2.3.7: Throughout the planning period, EDC or MDD set aside grant funds for outdoor amenities for CBD businesses, including awnings, signs, planters, murals, trash receptacles and benches. In addition, the City could sponsor a contest or develop a brigade of volunteers to create these amenities at cost.

Policy 2.3.8: By 2015, City encourage businesses to develop shared parking agreements and place signage inviting CBD visitors to use lots at agreed upon times.

Policy 2.3.9: By 2016, City officials work with Twin Palms owners to create a better entranceway between the units and downtown that will encourage visitors to walk across Robertson and stroll downtown.

Table 12D: Central Business District Improvements Plan, 2012-2032

Phase/ Year	Capital Projects	Estimated Cost	Source of Funds
Phase I	**/ East End**		
2012-2016	Convert the vacant lot at the southwest corner of Heywood and FM 106 to parking and mini-park, alternatively convert land	$120,000 to $150,000	MDD, Local, TCF, TxDOT

	elsewhere in the CBD or on the eastern outskirts, or behind buildings for parking. City funded-or joint funded with a landowner/proprietor for a total of 40 additional parking spaces and either a mini-park or screening in alleys from residences		
2015-2017	Rehabilitate east end sidewalks (1,600 LF), add decorative lighting and upgrade 9 ADA ramps to standard, paint mural on RV Park fence, adopt district design ordinance for signs and awnings	$170,000*	GEN ($35,000 match), TXDOT, TCF, Local
2021-2023	Improve alleys between Paloma and Bristol and Harrolds and Robertson by paving and/or re-paving 1,200 LF of alley street, and adding low level lighting and screening between alley and residences	$110,000	MDD, LOCAL, TCF, TxDOT
Phase II	**/West End**		
2016	Add Gateway signs and/or border landscaping at the east and west end of the CBD	$10,000	EDC, LOCAL
2017-2020	Create a scenic overlook in City Park, and undertake park improvements that would wrap activities around City Hall to front FM 106.	$25,000	TP&W, MDD, THC, Port
2021-2026	Create continuous sidewalks, upgrade existing sidewalks and add standard ADA ramps and lighting in CBD west end*	$100,000	GEN ($35,000 match), TXDOT, TCF, LOCAL (business assessment)

Year	**Non-Capital Projects**	**Estimated Cost***	**Source of Funds**
2012	Establish a Downtown committee. First action includes surveying businesses, tourists and residents about retail and other needs	N/A	GEN
2012	Move the City 's historical exhibit from City Hall to a vacant window front downtown, or advrtise the exhibit in a vacant store front and give directions to City Hall	$250	GEN/EDC
2013	Downtown committee develop a brand for the City	$5,000	LOCAL/Volunteer
2012-2025	Continue to provide financial assistance to property owners for building facade	$5,000 (Annual)	EDC, Texas AgriLife

	improvements, street furniture, and trees or gardens downtown		Extension
2013	Establish a funding source to assist developers/business owners with downtown building improvements	$100,000 in seed money	MDD, LRGVC EDD, USDA
2013-2014	Adopt zoning amendments that specify downtown regulations for building setbacks, parking location, awnings, allowable uses and screening between businesses and residences	$2,000 legal review	GEN
2014	Revise city website to add pages for business development and links to ordinances and assistance programs for businesses	$3,000	GEN
2014	Adopt City ordinances making alleys between Bristol and Paloma one way and place signs delineating one-way status, and requiring plats and site plans to depict existing trees	$500	GEN/EDC
2015-2032	Market southwestern block of CBD for redevelopment, including housing, restaurant and retail	Varies	MDD

GEN = City of Rio Hondo municipal funds; MDD = Sales tax revenue collected through the City of Rio Hondo Municipal Development District; EDC = Sales tax revenue collected through the City of Rio Hondo Economic Development Corp.; LOCAL = volunteer time and donations from private citizens, charitable organizations, and local businesses; Port = Port of Harlingen; TCF = Texas Department of Agriculture Texas Capital Fund Downtown Revitalization Programs; TxCBDG = Texas Community Development Block Grant program through the Texas Department of Agriculture, THC = Texas Historical Commission, including the Heritage Tourism Partnership Grant; USDA = US Department of Agriculture Rural Development; TXOT = Texas Department of Transportation Surface Transportation Program.

* Cost for sidewalk is for 9' concrete sidewalk, 4" thick, 6x6 wire mesh; calculated from R.S. Means Heavy Construction Cost Data, 66th Edition, 2008; $20 per linear foot includes material, labor and equipment; excludes engineering costs and contractor's profit.

Water and Sewer Distribution Study

5 Water Supply and Distribution Study

5.1 Review of Prior Studies and Existing Data

The exact dates of the original construction of the City of Rio Hondo's water distribution system are unknown. The type of materials and the degree of deterioration in the older lines indicates that the original system was installed sometime in the 1940's and 1950's. The staff at the City has indicated that approximately 30-40 percent of the system is original. There have been a series of studies performed on the water supply, treatment, storage, and distribution over the past thirty years. The studies are listed in chronological order below:

- Potable Water Requirements; Neptune-Wilkerson Associates, Austin, 1981. This is the study that produced the design parameters for the water treatment plant (WTP).
- Comprehensive Planning Study; Carlos Colinas Vargas and Associates, 1986. This was a general study of the system.
- Comprehensive Planning and Capacity Study; Ricardo Gomez and Associates in collaboration with Guzman & Munoz Engineering and Surveying Inc. 2001. This was also a general study of the system.

All of these studies produced information that was used to guide the City in an ongoing improvement program. Each of the studies also resulted in a new set of system maps.

System improvement projects have generally been implemented over the past 25 years through various Texas Department of Agriculture Grant Programs. Until 2011, these programs were housed at the Texas Department of Rural Affairs (TDRA, formerly ORCA). These projects are described briefly as follows:

- 1986 – Installed approximately 8,100 LF of 6" water line, with fire hydrants and service re-connects;

- 1997 – Installed approximately 8,500 LF of 12" water line, 5,100 LF of 8" water line, and fire hydrants, and service re-connects;
- 1999 – Water treatment plant improvements including an additional ground storage tank (GST) with supply line, effluent line, transfer line, high service line, replaced two pumps, and installed a new pump;
- 2000 – Water treatment plant improvements including refurbishing the clarifier, installed a new pump, installed a new sludge pump, and installed new chemical feed equipment for sludge dewatering;
- 2006 – Refurbished the elevated water tank (EST), installed approximately 9,200 LF of 8" water line, gate valves, fire hydrants, and service re-connects;

The following discussion provides an inventory of the major components of the City's water system as of the date of this Comprehensive Plan. The plan will also identify areas of operation in which system improvements should be implemented in order to improve the safety, efficiency, and economy of the treatment and distribution operations. The plan will conclude by providing a prioritized summary of the needed improvements and their estimated costs.

5.2 Water System Inventory

The City of Rio Hondo receives raw water from the Cameron County Water Control and Improvement District # 3 (CCWCID #3). The raw water is temporarily stored in a reservoir adjacent to the WTP. The water is processed through the plant by adding chlorine, lime, and alum for pre-chlorination, ph adjustment, and coagulation, respectively. The water then goes through mechanical rapid-mix, two-stage mechanical flocculation, clarification and solids settlement, and filtration. The water is then transferred to two (2) ground storage tanks. Two high-service pumps send it on to the distribution network with an elevated storage tank floating on the system to maintain operating pressure. Documentation by TCEQ indicates that the system experiences an average daily demand of 0.370 MGD (370,000 gallons per day) and has experienced a maximum daily demand

of 0.593 MGD (593,000 GPD) on 5/30/2010. The WTP is designed to produce up to 0.792 MGD, or 7920,000 gallons per day (GPD). *Table 5A* and *5B* show the inventory and locations of the various components associated with water treatment, storage, and distribution system.

Table 5A: Major Water System Components

Component	Location	Capacity or Size
Surface water source	CCWCID/Rio Grande River	By Contract
Raw water reservoir	NE of WTP	0.792 MG
Raw Water Pumps (2)	Raw Water Reservoir	550 GPM, 550 GPM
WTP	City Plant Site – Robertson Road	0.7921 MGD
GST # 1	City Plant Site – Robertson Road	214,000 Gallons
GST # 2	City Plant Site – Robertson Road	214,000 Gallons
Elevated Storage Tank (EST)	Adjacent to WTP Site	150,000 Gallons
Transfer Pump #1 Transfer Pump #2	City Plant Site – Robertson Road	550 GPM 550 GPM
High Service Pump # 1 High Service Pump # 2	City Plant Site – Robertson Road	550 GPM 550 GPM

Source: TCEQ Water Utility Database information indicating a total of 720 connections to the system and using the maximum WTP capacity of 0.781 MGD as reported in the CCI Report # 906077 – 03/24/11

Table 5B: Water Distribution System Components

Component	Linear Feet (LF)	Component	# Of Units
2" Line	918	12" Line	12,018
4" Line	16,043	Gate Valves	105
6" Line	16,264	Service connections	720 (TCEQ Data)
8" Line	21,681		

5.3 Water System Analysis

Standards and Criteria: The Texas Commission of Environmental Quality (TCEQ), the American Water Works Association (AWWA), and the U.S. Environmental Protection Agency (EPA) have established regulations and standards for the safe treatment, storage, and distribution of potable water to the public. All Public Water Supply (PWS) systems operating within the State of Texas must adhere to these regulations and standards.

According to copies of recent routine compliance reports from the TCEQ,

TCEQ has adopted the following engineering standards that apply to the minimum production and supply capacities for public water systems:

Table 5C: Minimum Water System Standards

FACILITY OR MEASURE (Based on 720 Connections)	TCEQ / Engineering Standard	City of Rio Hondo
Well Production, Surface Water Production, or Purchase Capacity (GPM/Connection)	0.6	0.76***
Total Storage – TCEQ (gal/connection)	200	802***
Elevated Storage (gal/connection)	100	208***
Raw Water Pump (GPM/Connection)*****	0.6	0.76*****
Transfer Pump (GPM/Connection)*****	0.6	0.76*****
Service Pump (GPM/Connection)****	2.0	0.76****
Service Pump Peaking Factor (GPM)	Max Day Demand (GPM) x 1.25 = **532**	550
Normal Operating Pressure (psi)	35	50-67
"C" Certified Operators*	2	4
Minimum Main Size**	2"	2 "

Sources: TCEQ and Texas State Data Center Population Estimates for 2009 and plan fieldwork
**Depends on system type and size, according to TCEQ 30 TAC 290, Subchapter D: Rules and Regulations for Public Water Systems, Section 290.46*
** According to TCEQ 30 TAC 290, Subchapter D: Rules and Regulations for Public Water Systems, no new waterline under two inches in diameter will be allowed to be installed in a public water system distribution system. These minimum line sizes do not apply to individual customer service lines.
**** Calculated using TCEQ Water Utility Database information indicating a total of 720 connections to the system and using the maximum WTP capacity of 0.792 MGD as reported in the CCI Report # 906077 – 03/24/11*
***** If Elevated Storage Capacity is > 200 Gallons/Connection, Service Pump Capacity is 0.6 GPM/Connection. If Elevated Storage Capacity is < 200 Gallons/Connection, Service Pump Capacity is 2.0 GPM/Connection. The minimum Elevated Storage Capacity requirement is always 100 Gallons/Connection. Service Pump Peaking Factor=Maximum Daily Demand (GPM) X 1.25*
****** Determined with largest pump out of service.*

Table 5C indicates that the City of Rio Hondo is operating in accordance with the established standards for minimum production and supply capacities in most categories. However, the information also indicates that there are some areas that may need improvement if the City experiences significant growth.

Water Supply: The City of Rio Hondo receives raw water from the Cameron County Water Control and Improvement District # 3 (CCWCID #3). The raw water is temporarily stored in a reservoir adjacent to the WTP. The water is processed through the plant by adding chlorine, lime, and alum for pre-chlorination, ph adjustment, and coagulation, respectively. The water then goes

through mechanical rapid-mix, two-stage mechanical flocculation, clarification and solids settlement, and filtration. The water is then transferred to two (2) ground storage tanks. Two high-service pumps send it on to the distribution network with an elevated storage tank floating on the system to maintain operating pressure.

The filtration rate capacity is five (5) GPM per square foot of filter area. The mixed media filter area currently consists of two (2) 7.6'x 7.5' filters for a total of 114.0 SF. This results in a capacity of 570 GPM, or 820,800 GPD. However, inefficiencies in other components such as the transfer pumps, raw water pumps, sludge pumps, and mixers combine to reduce the overall capacities to the rated 0.792 MGD (792,000 GPD).

Water Storage: For water systems with more than 250 connections, The Texas Administrative Code, Title 30, Chapter 290, Subchapter D, Sections 290.45(b)(1)(D)(ii) and 290.45(b)(1)(D)(iv) mandates that the systems have: a) 200 gallons of total storage per connection; and, b) 100 gallons of elevated storage per connection or a pressure tank capacity of 20 gallons per connection. According to the TCEQ Water Utility Database the City has 720 total connections. The City of Rio Hondo meets the established minimum standards for water storage capacity with 802 Gallons/connection of total storage and 208 Gallons/connection of elevated storage.

The city owns and operates 2 – 214,000 gallon GST and 1 – 150,000-gallon EST. City staff describes one of the GST's and the EST as being in fair to good condition. One of the GSTs has been subjected to several incidences of vandalism in the form of gunshot holes, and has been repaired as needed.

Water Distribution System: Water system pipes in the City of Rio Hondo range in size from 2" to 12" in diameter. The system is comprised of approximately 67,500 linear feet (LF) of distribution lines. The materials contained in these pipes are

primarily C-900 PVC. The remaining +/- 30% of the lines are either cast iron or a material that has yet to be determined by the current staff. The city does not have an established program for routine line replacement. The City does not dedicate specific revenues such as a water utility fund for annual repair and maintenance. The city replaces lines periodically when required by events such as line breakage, valve malfunctions, or other related system failures.

2" diameter lines represent roughly 2.9% (1,952 LF) of the water distribution system in City of Rio Hondo. The Texas Administrative Code (TAC), Subchapter D, Section 290.44(c) prohibits the installation of new water distribution mains smaller than 2". The standards permit more than ten (10) connections on existing water mains only when a licensed professional engineer deems it necessary. There are segments of 2" diameter pipe in the distribution system. Some are located at the periphery of the system where the intensity of development is low but several are located within established residential neighborhoods and have numerous single-family connections.

The City of Rio Hondo does not currently have any specific water line replacement programs. City staff has indicated that the City is interested in developing a routine line replacement program if the appropriate funding mechanism can be established.

System Water Pressure. The City's water system operates at a normal working pressure of approximately 51-52 psi. This is sufficient to operate the system effectively. The two (2) high-service pumps deliver water to the system at pressure and the elevated storage tank (EST) floats on the system to maintain this operating pressure. The EST can be bypassed and the service pumps can provide pressure directly to the distribution network in the event that repairs must be made to the EST.

Future Development Considerations: The City of Rio Hondo is projected to experience some degree of growth during this planning period. The Texas Administrative Code (TAC) Title 30, Chapter 291 states the when a water utility reaches 85% of its minimum capacity requirements it must submit to the TCEQ Director a planning report indicating how the utility plans to expand its capacity in order to meet future demands. According to the information contained in the latest TCEQ Compliance Investigation, the City's system is near or slightly above 100% of some of those minimum capacity requirements. Some requirements will support a limited number of new connections before reaching the 85% threshold. A summary of allowable connections per requirement is shown below.

Table 5D: Capacity for New Connections

Measure	Required	Provided	# New Connections
WTP Production Capacity	0.6	0.76	59
Total Storage	200	802	1,736
Elevated Storage	100	208	555
Service Pump Capacity	2.0	0.76*	59*
Raw Water Pump Capacity	0.6	0.76*	59*
Transfer Pump Capacity	0.6	0.76*	59*

** *** Calculated using TCEQ Water Utility Database information indicating a total of 720 connections to the system and using the maximum WTP capacity of 0.782 MGD as reported in the CCI Report # 906077 – 03/24/2011*

The information shown above indicates that the most restrictive elements in the City's water system with respect to future growth are the elements associated with the WTP's production capacity, raw water pump capacity, transfer pump capacity, and the distribution system's high service pumps.

The population is estimated to grow by approximately 400 residents during the planning period. The basis for this estimate is explained in detail in the Chapter 2: Population Analysis. The average number of persons per household in Rio Hondo is approximately 3.0. If there are 3.0 persons per connection, then 400 additional persons will equate to approximately 134 new connections. With the current number of connections at 720, the City may have as many as 854 connections by the end of the planning period. As mentioned previously, the minimum production capacity per state requirements is 0.6 GPM per connection.

A total of 854 connections will require a WTP production capacity of 512 GPM, or 737,856 GPD (.738 MGD). If the City is to remain under the 85% threshold for the entire 20-year planning period, the capacity will need to be .738 MGD/0.85 = +/-.868 MGD.

This plan proposes improvements to the WTP that will increase the plant's capacity to approximately this value. A brief description and cost estimate of these improvements are presented in the final section of this chapter.

Fire Protection Considerations. The primary consideration for fire protection issues is whether or not the system is capable of delivering sufficient flow volume at sufficient pressure to effectively respond to emergencies. The standards for adequate fire protection are established in the International Fire Code (IFC). The code recommends minimum flow volume, flow pressure, hydrant spacing, and construction standards. Examples of the IFC recommendations are as follows:

1. Every building in a community should be located no more than 500' from a fire hydrant; and
2. All fire hydrants should be installed on water mains no smaller than 6" in diameter; and
3. Each hydrant should provide a minimum flow volume of 1,500 GPM; and
4. The minimum flow volume should be delivered at a minimum residual pressure of 20 psi.

Fire departments perform individual hydrant flow tests to determine if adequate pressure and flow rates are available at specified hydrant locations. Testing every hydrant is usually beyond the capabilities of most small communities, but field-testing at selected hydrants can give the City some preliminary information on water system fire fighting capabilities. When any major new subdivision construction is proposed, a computer-aided water system model of the existing conditions and the effects of the proposed development should be prepared by

the consulting engineer. This model will assist the City and its representatives to evaluate the existing system's capacity to provide adequate flow volume at sufficient pressure to effectively respond to emergencies.

There are homes within the City of Rio Hondo that are not within 500 feet of a hydrant connected to a 6" water main. There are also several homes that are near fire hydrants installed on 4" mains. A 4" line will provide adequate flow volume and pressure for fire fighting purposes under ideal conditions, but the configuration is usually not effective. A 2" line cannot provide adequate flow and pressure for fire fighting purposes under any conditions. City staff has indicated that there are a significant number of fire hydrants that are non-functional. This plan recommends several line replacement projects for aging, deteriorating, and/or undersized lines. All of these line replacement projects will include lines of sufficient size to provide adequate flow and pressure for fire fighting purposes. These projects will also include fire hydrants at the appropriate locations. There is also a proposed project for aging, deteriorated, and non-functioning fire hydrant and valve replacement throughout the City that will include a comprehensive survey of these items in order to identify those that require replacement.

System Operations. TCEQ conducted a Comprehensive Compliance Investigation (CCI) in February 2009. TCEQ records indicate that there were several outstanding violations from previous investigations in 2002, 2003, 2004, 2005, 2006, and two (2) in 2007. The alleged violations (AV's) have been referred to the TCEQ Enforcement Division in the past, and the City's system is currently under an Agreed Order # 2005-1348-PWS-E. All of these AV's involve the WTP capacity as described above. The City is currently seeking a financial package from the USDA – Rural Development Office to begin the process of upgrading the WTP in order to address all of the outstanding issues.

Water System Revenues: The City of Rio Hondo has adopted a comprehensive rate schedule that distinguishes residential water rates from commercial water rates. There are also rate categories for sprinkler systems, multi-housing, and recreational vehicles/mobile home parks, although in some cases the rates are the same. The rate schedule as adopted by Ordinance # 363 dated March 2011 is as follows:

a) Residential Rate: Minimum bill for up to 3,000 gallons = $26.00
   And for all gallons over 3,000 gallons = $3.10/1,000 gallons

b) Sprinkler System: Minimum bill for up to 3,000 gallons = $26.00
   And for all gallons over 3,000 gallons = $3.10/1,000 gallons

c) Commercial Rate: Minimum bill for up to 3,000 gallons = $26.00
   And for all gallons over 3,000 gallons = $3.10/1,000 gallons

d) Multi-Housing Rate: Minimum Rate to be charged for each active service in a Multi-unit Facility such as Apartments and Housing Facilities:
   1. Minimum bill for up to 3,000 gallons Occupied Unit = $26.00
   2. Minimum bill for up to 3,000 gallons Not Occupied = $14.60
      And for all gallons over 3,000 or a portion thereof over the total minimum amounts = $3.10/1,000 gallons

Table 5F contains information about the revenues and expenditures of the water utility department. The information is intended to give the City an indication of whether or not the City water rates are set at a level sufficient to support the operation and maintenance of the water supply and distribution system without placing an undue burden on the ratepayers or customers. The revenue information is obtained directly from billing information provided by the City for the period of time from January 2010 through December 2010. The expenditure information is for the actual fiscal year period from October 2009 through September 2010. This plan is assuming that the slight difference of three (3) months will not significantly affect the analysis as the pumping rates are fairly uniform for the past two (2) years.

According to the information provided by the City and shown in *Table 5F,* the revenues received from water customer billings is below the water production costs. This may be due to the fact that the water costs are based on actual costs incurred during the fiscal year 2009-2010, and the water revenues are based on the billing information for the calendar year 2010. The actual costs figures for 2010 are not yet available. When these costs become available, the City should perform a water rate study in order to determine an appropriate rate that will at least keep the revenues sufficient to cover the costs.

It may be desirable for the City of Rio Hondo to consider establishing a dedicated utility fund with excess monies generated through customer billings rather than transferring the excess to the general fund. This fund may be used to facilitate the training of City personnel, provide maintenance services to address TCEQ violation issues, and contribute to financing future system improvements. Any decision of this nature would have to be considered in the context of the resource requirements of the general fund at the time of consideration.

Table 5E: Water Costs, 2009

(1) 2010 Total Treated Water Pumped (MG)	115.34
(2) 2010 Total Annual Water Billed (MG)	73.19
(3) City Water Usage-Unbilled	Unknown
Apparent Water System Losses (MG) {(1) - (2) - (3)}	42.147
2009-2010 Water Expenditures by City ($$)	$418,160
2009-2010 Cost per 1,000 Gallons ($$)	$5.71
2009-2010 Cost per Customer (923 Connections)	$453.04
2010 Water Revenues ($$)	$407,252
2010 Water Revenues per 1,000 Gallons ($$)	$5.56
2010 Revenue Per Customer (923 Connections)	$441.23
2010 Monthly Revenue Per Customer ($$)	$36.77
2010 Average Monthly Usage Per Customer (Gallons)	6,608
2010 Monthly Cost to Customer for 1,000 gallons ($$)	$5.56
2009-2010 City Cost to Produce 1,000 gallons ($$)	$5.71

Notes: Calculated using 2009 TCEQ Water Utility Database information indicating a total of 923 connections to the system and as reported in the CCI Report # 722671 – 02/03/2009; TCEQ counted 923 connections in its 2009 reports, this number was revised to 720 connections in later reports.

Water losses: Unmetered water usage and/or unaccounted for usage affects the cost to provide water services. The information shown above indicates that approximately 41,147,500 (42.15 MG) gallons of water is either unbilled or unaccounted for. This value is reached by subtracting the amount of water billed from the amount of treated water pumped in 2010. Part of this value is simply authorized unmetered water use by City departments. The remainder of the unaccounted water is probably water loss. A small portion may be unauthorized use. If one uses the entire amount of 42.15 MG and compares it to the total treated water pumped, a value of +/- 36.5% is calculated as water loss. A typical value of acceptable water loss ranges from 6% - 11%. However, if one assumes that a significant portion is authorized unbilled water use by various City departments, the actual water loss may well be within the acceptable range. Major sources of water loss include:

- Line leakage,
- Line breaks,

- Aging or faulty meters,
- Inaccurate or incomplete record keeping,
- Water theft and unauthorized use.

The City may want to consider installing equipment and establish operations to meter for authorized uses of water that are not billed.

Regional and Drought Planning. In 1999, the 75th Texas Legislature passed Senate Bill 1. This legislation requires that all entities providing public water supplies must develop drought contingency plans. These plans must be implemented during periods of severe water shortages and drought. A drought contingency plan often combines several strategies designed to achieve long-term advancements in the efficient use of water. The plans require the development of specific response measures aimed at avoiding, minimizing, or mitigating the risks and impacts of drought-related water shortages and other emergencies. The plan adopted by a water provider should ensure the provider's capability of providing adequate water supplies under drought conditions.

The City of Rio Hondo adopted a plan in July 1998, Ordinance No. 274. The comprehensive Drought Contingency Plan contains three "Trigger Conditions" under which the City of Rio Hondo will initiate drought contingency measures. These trigger conditions are as follows:

1. Voluntary Water Conservation – When the level of U.S. water stored in Amistad and Falcon Reservoirs reaches 51%, or 1.66 million acre-feet (MA/F);
2. Mandatory Water Conservation – When the level of U.S. water stored in Amistad and Falcon Reservoirs reaches 25%, or 834,600 acre-feet;
3. Water Curtailment – When the level of U.S. water stored in Amistad and Falcon Reservoirs reaches 15%, or 504,600 acre-feet.

The Emergency Management Program describes the specific actions that the City of Rio Hondo will take under each "trigger condition". As each successive trigger condition is reached there are accumulative actions that will be taken by the City ranging from informing the public of the situation, through prohibiting the use of sprinkler systems for lawns, gardens, landscaped areas on certain days, to limiting all outdoor irrigation of vegetation to the hours of 6:00 p.m. to 10:00 P.M. on weekends.

Regional and Drought Planning: The Region M 2006 Rio Grande Regional Water Plan (RGRWP) projects that Cameron County as a whole will experience a population increase of approximately 41% during the planning period covered in this Comprehensive Plan (CP). The RGRWP identifies municipal water use and irrigation water use as the two largest users of the water supply. The municipal water use is projected to increase by approximately 37% during the CP planning period, and the irrigation water use is projected to decrease by approximately 12% during the same period (2012-2032). This decrease is due to the conversion of land from agricultural use to urban use as a result of population growth. However, the RGRWP predicts that the City of Rio Hondo municipal water needs will actually operate under a slowly declining surplus during this same period. The City should consider some of the strategies that the RGRWP sets forth for addressing any potential deficits. These include but are not limited to:

- Municipal water conservation;
- Non-potable reuse of reclaimed water;
- Acquisition of additional Rio Grande water through water rights purchase and contract;
- Groundwater development.

Texas water law requires that revised and updated Regional and State Water Plans be prepared every five years. The 2011 Plans are currently in the public comment stage and may be found at the TWDB web site.

The Rio Hondo Comprehensive Plan places a high priority on a continuing program of replacing old and undersized system lines to help ensure that the City and the surrounding area continue to meet local water supply demand.

Prioritized Problems. City leaders, residents, staff, and consulting engineers have identified the following areas of concern with regard to the water system:

1. A need for upgrading the water treatment plant in order to increase plant efficiency;
2. A need to replace aging, deteriorated lines throughout the system that are susceptible to leaks and breaks;
3. A need to replace the southern main line under the Arroyo; and
4. A need to replace and/or repair malfunctioning valves and fire hydrants;

Goals and Objectives for the Water System

Goal 1: A local water system that operates efficiently and cost-effectively.

Objective 1.1: Take necessary steps to prevent future TCEQ notices.

Policy 1.1.1: Promote and exercise preventative maintenance by inspecting all facilities once per year.

Policy 1.1.2: Maintain a monitoring plan and report on a timely basis.

Objective 1.2: Reduce system water loss by 40% by 2030.

Policy 1.2.1: Implement methods to classify meters and replace meters that are damaged or leaking.

Policy 1.2.2: Replace deteriorated lines throughout system, with priority given to those made of obsolete materials.

Policy 1.2.3: By 2016, enact procedures to document water used but not billed.

Objective 1.3: The city is financially able to maintain and improve the system to improve quality of life for residents and enable growth.

Policy 1.3.1: By 2013, evaluate rate structure and usage characteristics to determine if a rate increase would be feasible and enable the city to complete more line replacement projects.

Policy 1.3.2: Beginning in 2011 and continuing throughout the planning period, regularly apply for available grants through the Texas Department of Agriculture's Office of Rural Affairs to fund replacement of aging, deteriorated water lines.

Goal 2: City and area residents have clean, safe, potable water.

Objective 2.1: Over the planning period, deteriorated lines and equipment are replaced and/or improved.

Policy 2.1.1: Continue maintaining and inspecting the existing system facilities according to a regular schedule and providing repairs as the need arises.

Policy 2.1.2: In phases throughout the planning period, replace deteriorated and undersized lines with PVC lines 4" or larger in diameter.

Policy 2.1.3: In phases throughout the planning period, replace all asbestos concrete lines with the appropriate-sized PVC pipes.

Goal 3: Customers have access to a sustainable water supply that provides sufficient pressure and capacity to allow future economic growth.

Objective 3.1: By 2016, upgrade the water treatment plant to ensure adequate production capacity.

Policy 3.1.1: Upgrade all treatment plant components to increase capacity to adequate levels.

Policy 3.1.2: Install fire hydrants and upgrade lines in areas with inadequate fire protection coverage, replace malfunctioning valves and fire hydrants.

5.4 Water Supply and Distribution System Plan

Proposed System Improvements – Planning Period 2012-2032:

The following section describes a series of proposed improvements to the existing water treatment, storage, and distribution system. The improvement projects are presented as phased improvements that are suggested for implementation over the 20-year planning period encompassed by this Comprehensive Plan.

The projects are listed in a sequence that represents just one of several possible approaches, all of which should lead to the achievement of the long-term goals adopted by the City for the operation and maintenance of the water treatment,

storage and distribution system. The sequence shown in this plan is a logical, step-by-step process intended to increase the safety, efficiency, and economy of the water system operations. The sequence is intended only as a suggested program of phased improvements, and alternative sequences are recommended if funding availability requires significant changes.

Table 5F contains the estimated projected costs for each phase of the improvements program. These costs are based on current costs of record for similar projects in the same geographical area of the state. Every effort has been made to include appropriate cost factors such as inflation, variations in the market, and advances in water treatment, storage, and distribution technology. These cost estimates are predicated on several assumptions related to the scope of each phase. These assumptions are as follows:

- The choice of specific lines to be replaced within each area – The cost estimates assume that lines less than six (6) inches in diameter within the area of interest will be replaced with 6"-8" C-900 DR 18 PVC pipe and fire hydrants at the appropriate spacing. Without specific information indicating either volume or pressure problems in the immediately surrounding service areas, the existing lines six (6) inches or larger are assumed to be in serviceable condition and will remain so for the length of the planning period. The priority is placed on replacing the smaller lines, but each individual project evaluation may identify segments of larger lines that need replacement. In this event, the funding should be applied to replacing the lines with the greatest need for repair, regardless of size;
- Fire hydrants – Fire hydrants are included in the estimates. However, when replacing lines of 6 (6) inches and larger, the estimates will assume that approximately 50% of the existing fire hydrants, if any, can be re-used;
- Service re-connects, valves, and appurtenances – Service re-connects, valves, and appurtenances are estimated at 12%-15% of the line costs,

depending on the housing density and complexity of the proposed improvements;

- Street and Pavement Repair – Streets, driveways, and pavement repair is estimated at 10%-12% of the line costs, depending on the housing density and the presence of curb & gutter in the area of interest;
- Engineering and Surveying – Engineering and surveying services are estimated at 15% of the estimated construction costs of the combined elements described above.

The suggested phases for the system improvements are as follows:

- ✓ Phase 1 – Obtain funding to upgrade the WTP in order to increase the production capacity and provide for future growth. Project will include replacing the smallest pump at the raw water pump station with a minimum 750 GPM pump and controls; adding a minimum of 20 SF to the mixed media filter area, upgrading mixers, upgrading flocculation basins, upgrading the sedimentation basin(s), adding a new 0.1 MG GST, upgrading plant piping as needed, and replacing the process control panel and associated electrical work;
- ✓ Phase 2 – Obtain funding to replace approximately 6,350 LF of undersized, aging, and deteriorated water lines in selected areas of the City. Project will include replacing the broken southern main line under the arroyo The project will include boring and casing under the arroyo, approximately 13 fire hydrants at appropriate locations, service re-connects, valves, and street, pavement, and driveway repair. Project will include approximately 300 LF of 12" bore & casing under the arroyo;
- ✓ Phase 3 – Obtain funding to replace approximately 7,950 LF of undersized, aging, and deteriorated water lines in the remaining areas of the City. The project will include approximately 16 fire hydrants at appropriate locations, service re-connects, valves, and street, pavement, and driveway repair;

✓ Phase 4 – Obtain funding to perform a comprehensive survey of all valves and fire hydrants in order to determine which of these components are malfunctioning. Project should include replacement or repair of all such defective components. Cost estimate assumes approximately 30 fire hydrants and 71 valves will need replacement with this project.

The City strives to provide a safe, efficient, and uninterrupted water supply while meeting all applicable water system standards. These goals can be accomplished by implementing the improvements described above over the planning period of 2012 through 2032. The estimated costs for the proposed improvements to the water system are as follows:

Table 5F: Water System Improvement Plan Projects, 2012-2032

Project ID/ Phase	Year	Project	Estimated Cost	Source
1	2012-2015	Upgrade the WTP to provide for future growth. Project will include; replacing the smallest pump at the raw water pump station; upgrading mixers, flocculation basins, and sedimentation basin(s), adding a new 0.1 MG GST, and replacing the process control panel and associated electrical work.	$552,000	TxCDBG, GEN (General Obligation Bond), USDA-RD, TWDB loan, City Utility Fund (Rev Bond)
2	2016-2020	Replace 6,350 LF of undersized, aging, and deteriorated water lines on FM 106, South Arroyo St. and S Reynolds/FM 1846. Replace broken southern main line under the Arroyo	$365,200	TxCDBG, GEN (General Obligation Bond), USDA, TWDB loan, City Utility Fund (Rev Bond)
3	2020-2026	Replace 7,950 LF of undersized, aging, and deteriorated water lines in northern and southern parts of the City.	$340,800	TxCDBG, GEN (General Obligation Bond), USDA, TWDB loan, City Utility Fund (Rev Bond)
4 (City Wide)	2026-2032	Survey and replace all malfunctioning valves and fire hydrants. Cost estimate assumes replacement of approximately 30	$342,125	TxCDBG, GEN (General Obligation Bond), USDA, TWDB loan, City Utility Fund

		fire hydrants and 71 valves.		(Rev Bond)
5 (City wide)	2012-2032	Continue the City's participation in the Region M Rio Grande River Regional Water Plan as the plans develop.	$1,500 (Annually)	City Utility or General Fund

** TxCDBG = Texas Community Development Block Grant Program, administered through the Texas Department of Agriculture, TWDB = Texas Water Development Board grants and loans, UTILITY = City utility funds/revenue bonds, USDA = US Department of Agriculture Water and Wastewater Infrastructure loans and grants, GEN = Municipal Funds and general obligation bonds

Notes on Cost Estimates

1	GrantWorks Engineering Staff provided cost estimate.
2	GrantWorks Engineering Staff provided cost estimate.
3	GrantWorks Engineering Staff provided cost estimate.