

APPENDIX D

Title VI / Environmental Justice

Highlights

In 2000, H-GAC commissioned a series of consumer focus groups, community roundtable discussions, and in-depth interviews with community leaders on Environmental Justice. All research was qualitative and designed to get a better understanding of environmental, transportation and safety concerns from poverty-level residents in the region. Findings are detailed in this appendix and include the following:

- The most effective way to reach members of a community regarding environmental and transportation issues varies based on subgroups.
- With respect to adequate transportation, there are underserved markets within low-income and ethnic subgroups that should be targeted.
- The need for additional transportation development lies inside the existing system. The current public transportation system could be enhanced to include areas like neighborhoods and small communities that are currently circumvented.
- There are many safety issues associated with the current disrepair of the roads in the area.

In addition, H-GAC is conducting research to determine if certain segments of the population experience greater travel times to major activity centers (MACs) than other segments of the population.

- The targeted segments of the population include zero auto households, low-income households, and census tracts populated with large numbers of minorities.
- The purpose of the analysis is to determine equity (or lack of discrimination) in terms of accessibility to various activities by the transportation system.
- The primary analysis involves the calculation of average network travel times by modes (auto and bus) to specific destination activities such as employment, medical, educational and recreational facilities plus Department of Human Services (DHS) facilities.
- This initial analysis will be compared with other non-minority origin zones to determine a relative measure of accessibility.
- The same analysis will also be applied to a proposed system of transportation improvements so the results of a before-and-after scenario simulation can be presented.

Background

On February 4, 1994, President William Clinton signed Executive Order 12898: *Federal Actions to Address Environmental Justice (EJ) in Minority Populations and Low-Income Populations*. Executive Order 12898 augments the 1964 Title VI Civil Rights legislation that assures that “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” Environmental justice (EJ) is “the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income. Fair treatment means that no group of people, including racial, ethnic, or socio-economic group should bear a disproportionate share of the negative consequences resulting from industrial, municipal and commercial operations or the execution of federal, state, local and tribal programs and policies (U.S. Environmental Protection Agency).” The focus of EJ embraces three fundamental principles:

- Avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The U.S. Department of Transportation (U.S. DOT) expounded on EPA’s definition and stated that “in making determinations regarding disproportionately high and adverse affects on minority and low-income populations, mitigation and enhancements measures will be taken into account, as well as design, comparative impacts and the relevant number of similar existing system elements in non-minority and non low-income areas.”

The U.S. DOT has issued guidelines to Metropolitan Planning Organizations (MPOs) regarding their role in EJ. The role of the MPO is to:

- Explore needs within minority communities;
- Involve minority communities and disabled persons in the transportation planning process;
- Include minorities/disabled persons on boards and committees in leadership roles,
- Document Title VI efforts;
- Advertise public meetings in places where minorities/disabled persons go;
- Hold meetings at times and places convenient for the minority community;
- Communicate in languages other than English (orally and written);
- Consider special needs in public accommodations; and

- Follow up with the minority community after public meetings, when decisions are made and after project implementation.

Transportation Public Involvement Plan

H-GAC's Transportation Public Involvement Plan (TPIP) has EJ goals designed to work in tandem with the U.S. DOT EJ goals. An outline of H-GAC's TPIP follows:

Education

- Develop educational materials that support a cooperative planning process and describe regional transportation and related air quality plans and activities in a concise and straightforward manner.
- Develop educational materials on how transportation plans are affected by federal clean air mandates and how the failure to meet these mandates will affect the region economically.
- Disseminate this information to the general public.

Outreach

- Increase awareness of and interest in transportation plans and the transportation planning process using innovative approaches.

Participation

- Provide frequent opportunities for the general public and interested parties from the private business community, the public sector, environmental interests, neighborhood organizations, the disabled and other groups impacted by transportation plans to participate in the development of H-GAC transportation plans and to encourage public participation in transportation planning activities at every level.

H-GAC achieved the goal of an inclusive public outreach plan by conducting a series of community dialogues to receive public input specifically regarding the 2025 Draft RTP for the eight-county region. Community dialogues began in late May 2003 and continued through November 2003. Such community dialogues were held in the East End, Kashmere/Fifth Ward, Pasadena, Third Ward and Southwest Houston (Chinese Community School). The photo to the right illustrates the need for equitable transportation improvements in an EJ targeted area.



In 2000, H-GAC commissioned Saurage Research, Inc. to conduct a series of six consumer focus groups, three community roundtable discussions and a series of 48 in-depth interviews with community leaders on Environmental Justice in the eight-county Houston-Galveston transportation management area. All research was qualitative and designed to get a better understanding of environmental, transportation and safety concerns from poverty-level residents in the region.

Transportation Concerns

Current Commute Patterns

- Poverty-level residents of the surrounding counties are especially reliant on their car for their daily transportation needs.
- Walking and bicycling in poor neighborhoods can be a dangerous transportation alternative because of a lack of sidewalks and narrow roads.
- Residents are relatively unconcerned about the security at bus stops, but express many safety concerns regarding walking and driving on narrow, poorly lit roads in the rural counties.

Using the Transit System

- Poverty-level residents desire an expansion of the public transportation system, even though it is criticized for being inconvenient, to include the surrounding counties.

Participating in the Process

Information Sources

- Residents are passive in gathering information regarding environmental hazards and transportation problems that affect their community.

Patterns of Involvement

- Although their history of participation does not support the belief, poverty-level residents do not feel disenfranchised from the policy-making process that affects their community. They believe they are able to participate enough to effect their desired changes.
- If necessary to effect a policy change, poverty-level residents would take action, such as attending City Council meetings, distributing petitions, seeking litigation and notifying the media. However, many recognize that their influence as a traditionally underserved population lay in their ability to mobilize the community.

Community Roundtable Discussions¹
Key Findings²
August 2000

African-American Community Leaders

- Road construction seems to move slower in African-American neighborhoods than in other communities, creating inconvenience for the residents. Additionally, it seems the cleanup and replacement of landscaping is completed correctly in other communities, as opposed to long periods of disarray in African-American communities.
- The placement and length of freeway entrance ramps are inconsistent tending to bypass African-American neighborhoods.
- Many children live too close to their school to qualify for bussing, which means that children often have to walk through dangerous areas of the neighborhood to go to school. On days with inclement weather, many of these children do not attend school. In one instance, children must cross a Union Pacific railroad track to reach the school; if the train is sitting on the track or is in motion, children are faced with the safety hazard of crossing the railroad tracks.
- Large trucks (18-wheelers) travel on streets in low-income neighborhoods destroying the roads.
- Environmental hazards in neighborhoods, especially illegal dumping, are often not addressed because the neighborhood lacks appropriate deed restrictions or there are absentee landlords and apathetic renters; homeowners may be more proactive.
- Public outreach through the community via churches and schools, especially teaching children the issues, is key to informing this population.

Hispanic Community Leaders

- Transportation and environmental concerns are relatively unimportant to the Hispanic community unless their family is directly affected. Protecting the family is the first priority in the Hispanic community.
- Even the largest Hispanic organizations and associations tend to be reactive to environmental and transportation issues because the organizations lack the necessary internal structure to take proactive positions on issues.
- Non-Hispanic populations tend to treat the Hispanic community as a homogenous group because they share a single language. However, there are many subcultures within the greater Hispanic community.

¹ Suarage-Thibodeaux Research, "Environmental Justice in Houston-Galveston Area," August 2000.

² Total of 20 community leaders: 7 African American; 7 Hispanic; 6 Asian

- Education regarding environmental and transportation issues should be targeted via schools and existing Hispanic organizations and associations.

Asian Community Leaders

- The Asian community in the Houston-Galveston area is a very heterogeneous population. They are differentiated from one another, not only by nation of origin, but also by language.
- New immigrants have difficulty adapting to the city because of the many language barriers. A guide for new Asian immigrants is needed to provide information necessary to ease the immigration and assimilation process, including emergency phone numbers, newspaper subscriptions, school registration information, INS class availability and schedule, and voting instructions.
- The METRO bus system can be very confusing for Asian immigrants. The bus route brochure needs to be updated and printed in several Asian languages. Additionally, new immigrants need instructions explaining how to use the bus system, including bus transfers.
- The Asian population has difficulty recognizing the air quality problem in the region because many originate from countries where air pollution was highly visible.
- The Asian community does not have any identifiable leaders to unify the entire population.
- As a community, the Chinese view the act of reporting problems in their neighborhoods as unnecessary complaints. They would rather fix the problem or ignore it. Many do not know how to report problems or crimes to municipal authorities.
- Informing the Asian community will require communicating in all appropriate Asian languages. Information can be dispersed via INS training classes, community centers, temples and churches, and via the 10 Chinese schools in the area.

“The Challenges of Transportation, Congestion and Construction as Described by Thought Leaders in the African-American, Asian, Hispanic, and Rural Communities”³
Key Findings⁴
December 2002

Public Transportation Issues

Modes of Transportation

- According to respondent feedback, the four most frequently mentioned methods of transportation by low-income area residents are taking the bus/METRO, riding with friends or family, walking and driving a car. Frequency of use for each of these modes varies with respondent activity.
- Residents report walking as the most common form of transportation in the Asian community. This is because low-income Asians try to live near markets and all of their other essential locales.
- It is common in the Hispanic community for residents to drive illegally. That is, many of them have neither a driver’s license nor insurance because they do not have the proper documentation to obtain them.

Potential New Offerings

- While there seems to be sufficient transportation from the smaller communities to downtown, there is a lack of adequate transportation within the actual neighborhoods and communities. Respondents would like a system of shuttles or minibuses that run regular routes in high-use areas.
- The cost of transportation is sometimes an issue for low-income residents. Respondents recommend some type of subsidized program to make travel more feasible for these people.
- Respondents from all backgrounds would like to see more effective scheduling of public transportation. The daily schedules should start earlier and end later. There should be more frequent stops in high-use areas at more opportune times.
- It is distinctly possible that current public transportation programs are underutilized due to residential lack of familiarity and understanding. There is a demand to educate low-income folks about what options exist and how to use them.
- There appears to be a language barrier that is decreasing the optimal use of the METRO bus system for some minorities. Respondents generated valuable input and suggestions about potential ways to address the issue.

³ Saurage Research, “The Challenges of Transportation, Congestion and Construction as Described by Thought Leaders in the African-American, Asian, Hispanic, and Rural Communities,” December 2002.

⁴ 48 Interviews: 8 African-American; 16 Asian; 16 Hispanic; 8 Rural

Ideal Public Transportation System

- Based on respondent feedback, the ideal transportation system would be multi-level. There would be a large system that traveled to all the core areas (e.g. light rail). This would be supported by buses that ran regular routes on high-travel thoroughfares and a more personalized service, such as a jitney, to take people to specific neighborhoods and communities.
- To maximize effectiveness, the current transportation system needs to extend hours of operation to accommodate non-prime time travel and increase the frequency of stops along the more popular routes.
- When designing a public transportation system, all safety issues must be addressed, including proper seating, shelter, and lighting at drop-offs, as well as properly working handicap equipment that is up to code.
- According to respondents, elderly and low-income residents are currently underserved by public transportation, affecting both their ability to sustain everyday life and their ability to find and keep paying jobs.
- Many respondents support the new light rail, however, they often mention the need to expand the plan to cover a wider geographical area.
- Respondents believe increased funding should be focused within neighborhoods and to and from places of work, shopping areas and medical centers. Some of the areas with the most demand for more funds include the East End, Chinatown and downtown.

Change in Priorities

- Transportation priorities should focus more on suburbs and neighborhoods, especially those areas populated with elderly and low-income residents. Conversely, less emphasis should be placed on downtown.

Roadway Congestion and Construction

Effect on People's Lives

- Road construction affects different populations to varying degrees. Many respondents express deep concern about the negative effect it has on the communities.

Minimizing Negative Effects

- There are two main changes in construction management that would minimize negative effects on lifestyles: avoid simultaneous construction on areas in close proximity and do as much construction as possible during non-peak hours.

- Respondents voiced concerns about an unwarranted tendency to block off sections of a road when no apparent construction or safety issues exist.
- An important part of minimizing the frustration associated with construction projects is to provide pertinent information to the public, including justification of underlying projects, timelines, and progress reports toward completion.

Current Street Conditions

- Common concerns among respondents include insufficient drainage and lack of sidewalks. There are also many streets that are too narrow and some that have potholes and other damage to pavement.

Duration of Construction Projects

- A large number of Hispanic respondents say construction projects take much longer in their neighborhoods than elsewhere because of two perceived reasons: it takes longer to get approval to start on projects in these neighborhoods and the Hispanic communities have no voice to complain about improper procedures that delay projects.

Getting Expenditures for Improvement

- Voting is one of the main ways respondents believe residents can assist in getting construction improvement expenditures. Elected officials are perceived to have a lot of clout in regard to these issues.
- Another way for communities to assist in increasing funding for improvements is to form groups and voice their opinions. However, there are cultural, language and knowledge barriers limiting the power of minority and low-income populations to effect change through voicing their opinions.

Safety Concerns

Unsafe Locations

- There are many locations perceived as unsafe by respondents. The most common involve road quality: lack of sidewalks, improper drainage, narrow roads, damaged pavement. Less-cited issues include vegetation obstructions, inadequate traffic and lighting devices, excessive speed, railroad tracks, and unsafe bus shelters.

Making Locations Safer

- Respondents overwhelmingly requested the addition of sidewalks to make locations safer. They also wanted increased patrol of crime and construction of proper drainage systems.

Stoplights and Stop Signs

- Respondents agreed that additional stoplights and stop signs slow traffic down and make the roads safer, however, there are many specific locations that need attention.
- The area surrounding the intersection at 71st and Harrisburg was cited by numerous respondents as critically dangerous and in need of better traffic-keeping devices.

Public Involvement

Reaching the Community

- The most effective way to reach members of a community regarding environmental and transportation issues varies based on subgroups. Community-related gatherings are very effective for all groups. However, for Hispanics, TV, radio, and the school systems also work very well. For Asians, community newspapers are very useful.

News Regarding Public Transportation

- Television is a very common place where members of a community look for general news and information. However, there are some demographic differences in the use of other media. For Hispanics and rural residents, newspapers and radios are also effective. For Asians, community newspapers are more effective.

Getting Local News and Information

- General and local news and information are found quite frequently via television. However, radio is also a common source for Hispanics and African-Americans. Rural residents rely somewhat on newspapers, while Asians rely on newspapers more than other groups.

Strategic Implications

Target – With respect to adequate transportation, there are underserved markets within low-income and ethnic subgroups that should be targeted in new master plans.

Implode – The highest need for additional transportation development lies inside the existing system. The current public transportation system could be enhanced to include areas like neighborhoods and small communities that are currently circumvented.

Renovate – There are many safety issues associated with the current disrepair of the roads in the area.

Educate – The key to successful modification of public transportation is informing people of all socioeconomic classes about the current programs and asking them to provide feedback toward improvement.

Accessibility Analysis

H-GAC is currently conducting research to determine if certain segments of the population experience greater travel times to major activity centers (MACs) than other segments of the population using the automobile and transit. The targeted segments of the population include zero auto households, low-income households, and census tracts populated with large numbers of minorities. The purpose of the analysis is to determine equity (or lack of discrimination) in terms of accessibility to various activities by the transportation system. The same analysis will also show changes in accessibility with the implementation of a proposed system of transportation improvements so the results of a before-and-after scenario simulation could be presented. The primary analysis involves the calculation of average network travel times by modes (auto and bus) to specific destination activities such as employment, medical, educational and recreational facilities plus Department of Human Services (DHS) facilities.

Methodology

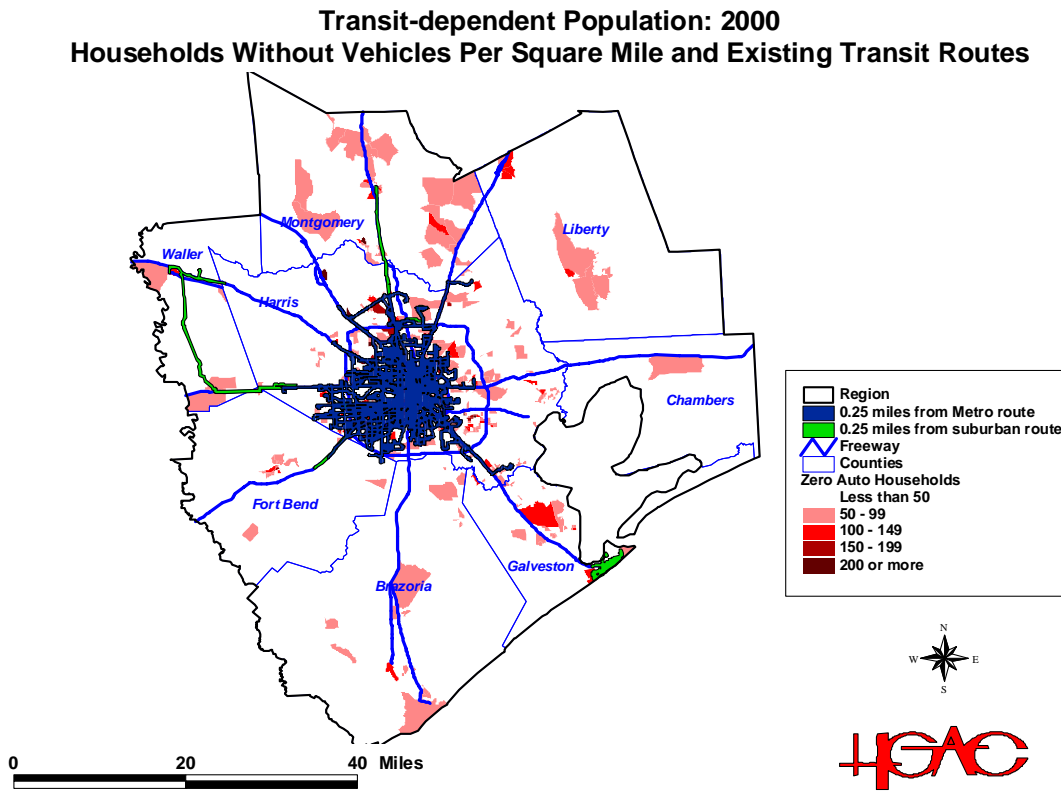
1. Identify and map low-income, minority, and zero-auto Census Tracts (TAZs) in the eight-county TMA. For the purpose of this research, H-GAC used the definition by the U.S. Department of Housing and Urban Development (HUD) for low income as 80 percent of the median family income for the area (county). Table 1 was used for the low-income determinations.

Minority, as it relates to EJ, is defined by U.S. DOT Order (5610.2) as:

- (a) Black – a person having origins in any of the Black racial groups of Africa;
- (b) Hispanic – a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race;
- (c) Asian American – a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands; and
- (d) American Indian and Alaskan Native – a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.

Zero-auto census tracts are census tracts identified as “No Vehicle Available” or a higher percentage of “No Vehicle Available” than the county average.

2. Identify and flag (with unique codes) census tracts for each county that meet the above criteria using GIS or EMME/2 as origin zones of interest. Compare this with other non-minority origin zones in the accessibility analysis. A transportation and demographic profile of each county and the associated census tracts was written and is available in the next section of this report.



3. Identify high-density employment centers, medical complexes, colleges and universities, and other special attractors as primary destination zones of interest with unique codes for each category.
4. Analyze low-income and minority zones. Depending on whether or not they are clustered together, they could be as zone subgroups of the region or individually by a random selection process.
5. Calculate average travel times for each origin zone group (or selected TAZs) for comparisons to other zone groups (or TAZs) for specific destination activities.
6. Summarize the calculated average travel time values in a table by mode and destination activity.
7. Prepare GIS-based maps to support the analysis and presentation of the results.

County Profiles

Brazoria County

Brazoria County is the southern most county in the Houston-Galveston eight-county transportation planning region. The total population is 241,767, and the county has a median income of \$48,632. According to the Census Transportation Planning Package (CTPP, 2000), 3,812 households or 4.7 percent of the county’s households have no available vehicle.

Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	18 percent	65 percent	47 percent
Black alone	73 percent	9 percent	-64 percent
Hispanic or Latino	8 percent	23 percent	15 percent
Asian	.5 percent	2 percent	1.5 percent
Other	.5 percent	1 percent	.5 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	26 percent	26 percent	0 percent
16-24 years	12 percent	12 percent	0 percent
25-64 years	5 percent	53 percent	48 percent
65 and over	8 percent	9 percent	1 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	4 percent	5 percent	1 percent
1 vehicle available	26 percent	30 percent	4 percent
2 vehicles available	39 percent	47 percent	8 percent
3 or more vehicles available	17 percent	19 percent	2 percent

Means of Transportation and Carpooling	1990 Census	2000 Census	Percent Change
No vehicle	81 percent	83 percent	2 percent
1 vehicle available	14 percent	13 percent	-1 percent
2 vehicles available	<1 percent	<1 percent	0 percent
3 or more vehicles available	3 percent	1 percent	-2 percent

Travel Time to Work	1990 Census	2000 Census	Percent Change
Less than 10 minutes	15 percent	13 percent	2 percent
10 to 14 minutes	14 percent	12 percent	2 percent
15 to 19 minutes	15 percent	13 percent	2 percent
20 to 29 minutes	19 percent	19 percent	0 percent
30 to 44 minutes	21 percent	2 percent	19 percent
45 or more minutes	14 percent	20 percent	6 percent

Census Tract 6619/TAZ 1659

Census tract 6619 is located in the northeastern part of Brazoria County. The tract is bound on the east by State Highway 288 and by Oyster Creek on the west. The total population of the tract is 10,629 and the median household income is \$42,699.

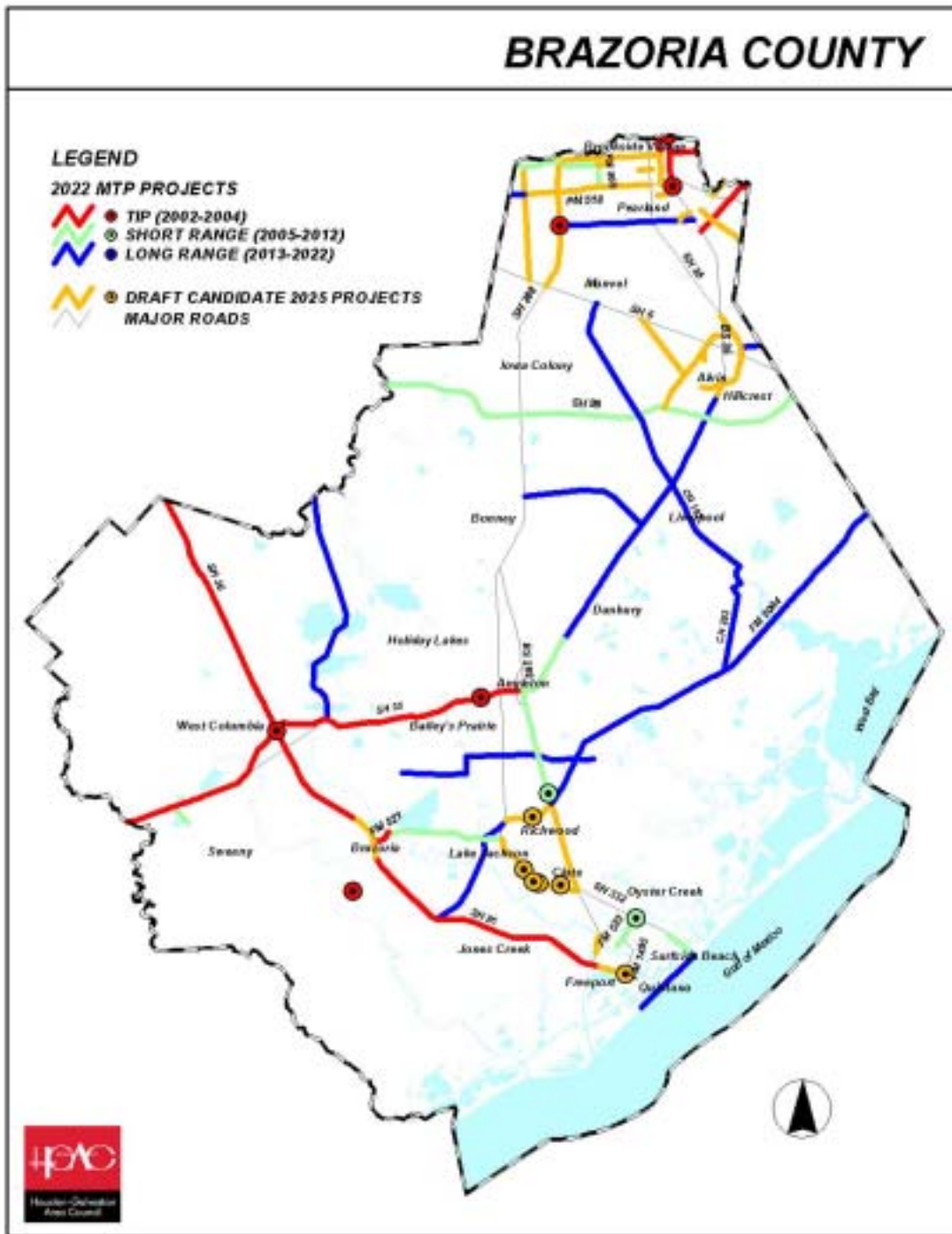
Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	38 percent	40 percent	2 percent
Black alone	41 percent	34 percent	-7 percent
Hispanic or Latino	20 percent	24 percent	4 percent
Asian	.5 percent	1 percent	.5 percent
Other	1 percent	1 percent	0 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	6 percent	5 percent	-1 percent
1 vehicle available	31 percent	33 percent	2 percent
2 vehicles available	43 percent	40 percent	-3 percent
3 or more vehicles available	20 percent	22 percent	2 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	9 percent	9 percent	0 percent
16-24 years	7 percent	6 percent	-1 percent
25-64 years	81 percent	81 percent	0 percent
65 and over	3 percent	4 percent	1 percent

Public Transportation in the Area

Connect Transportation provides transportation services for Gulf Coast Center consumers, community services organizations, seniors and the general public to destinations in Brazoria and Galveston counties.



Chambers County

Chambers County is in the eastern part of the Houston-Galveston eight-county transportation planning region. The total population is 26,031 and the county has a median annual income of \$52,986. According to the CTPP, 454 households (5 percent of the county’s households) have no available vehicle.

Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	80 percent	77 percent	3 percent
Black alone	13 percent	10 percent	3 percent
Hispanic or Latino	6 percent	11 percent	5 percent
Asian	.5 percent	1 percent	.5 percent
Other	.5 percent	1 percent	.5 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	26 percent	26 percent	0 percent
16-24 years	12 percent	12 percent	0 percent
25-64 years	52 percent	53 percent	1 percent
65 and over	9 percent	9 percent	0 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	6 percent	5 percent	1 percent
1 vehicle available	30 percent	38 percent	8 percent
2 vehicles available	42 percent	46 percent	4 percent
3 or more vehicles available	22 percent	21 percent	1 percent

Means of Transportation and Carpooling	1990 Census	2000 Census	Percent Change
Drove Alone	78 percent	84 percent	6 percent
Carpooled	16 percent	11 percent	-5 percent
Public Transportation	N/A	N/A	N/A
Bicycle or Walk	3 percent	2 percent	-1 percent
Other Means	3 percent	1 percent	-2 percent

Travel Time to Work	1990 Census	2000 Census	Percent Change
Less than 10 minutes	13 percent	18 percent	5 percent
10 to 14 minutes	7 percent	12 percent	5 percent
15 to 19 minutes	9 percent	13 percent	4 percent
20 to 29 minutes	2 percent	19 percent	17 percent
30 to 44 minutes	2 percent	21 percent	19 percent
45 or more minutes	5 percent	17 percent	12 percent

Census Tract 7103/TAZ 2376

Census tract 7103 is located in the northwestern part of the county, where the total population of the tract is 3,144 and the median household income is \$38,319.

Race/Ethnicity	1990 Census	2000 Census	Percent Change
White Alone	56 percent	63 percent	7 percent
Black Alone	42 percent	29 percent	-13 percent
Hispanic or Latino	3 percent	6 percent	3 percent
Asian	0 percent	.5 percent	.5 percent
Other	1 percent	2 percent	1 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No Vehicle	18 percent	12 percent	-6 percent
1 vehicle available	34 percent	34 percent	0 percent
2 vehicles available	36 percent	39 percent	3 percent
3 or more vehicles available	11 percent	15 percent	4 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	26 percent	21 percent	-5 percent
16-24 years	12 percent	13 percent	1 percent
25-64 years	50 percent	54 percent	4 percent
65 and over	13 percent	12 percent	1 percent

Census Tract 7104/TAZ 2384

Census Tract 7104 is located on the eastern side of the county and includes the cities of Winnie and Stowell. State Highway 124 runs through the county. The total population is 3,051 and the median annual income is \$39,648.

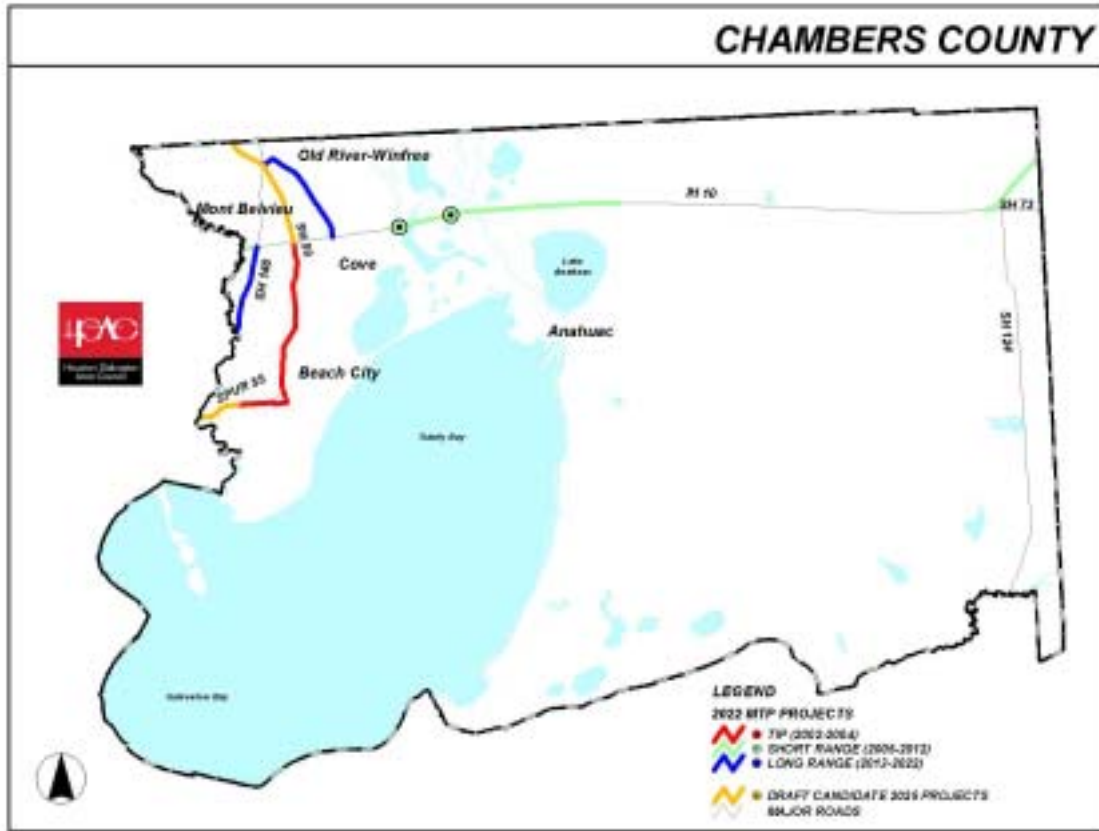
Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	85 percent	77 percent	-8 percent
Black alone	12 percent	12 percent	0 percent
Hispanic or Latino	3 percent	10 percent	7 percent
Asian	0 percent	.5 percent	.5 percent
Other	.5 percent	.5 percent	0 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No Vehicle	3 percent	5 percent	2 percent
1 vehicle available	40 percent	33 percent	-7 percent
2 vehicles available	42 percent	46 percent	4 percent
3 or more vehicles available	15 percent	17 percent	2 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	24 percent	23 percent	-1 percent
16-24 years	12 percent	15 percent	3 percent
25-64 years	53 percent	50 percent	-3 percent
65 and over	11 percent	12 percent	1 percent

Public Transportation in the Area

Currently, Chambers County is not served by any rural or urban public transit services. The City of Baytown does provide 24-hour non-emergency transportation services to eligible low/moderate-income senior and or disabled citizens within the city limits of Baytown.



Fort Bend County

Fort Bend County is in the southwestern part of the Houston-Galveston eight-county transportation planning region. The total population is 354,452 and the county has a median annual income of \$63,831. According to the CTPP, 3,153 households or 2.8 percent of the county’s households have no available vehicle.

Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	54 percent	46 percent	8 percent
Black alone	20 percent	20 percent	0 percent
Hispanic or Latino	19 percent	21 percent	3 percent
Asian	6 percent	11 percent	5 percent
Other	1 percent	1 percent	0 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	30 percent	28 percent	2 percent
16-24 years	11 percent	11 percent	0 percent
25-64 years	54 percent	55 percent	1 percent
65 and over	5 percent	11 percent	6 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	4 percent	3 percent	1 percent
1 vehicle available	25 percent	24 percent	1 percent
2 vehicles available	51 percent	52 percent	1 percent
3 or more vehicles available	20 percent	21 percent	1 percent

Means of Transportation and Carpooling	1990 Census	2000 Census	Percent Change
Drove Alone	80 percent	83 percent	3 percent
Carpooled	15 percent	13 percent	-2 percent
Public Transportation	1 percent	2 percent	1 percent
Bicycle or Walk	1 percent	1 percent	0 percent
Other Means	3 percent	1 percent	-2 percent

Travel Time to Work	1990 Census	2000 Census	Percent Change
Less than 10 minutes	6 percent	7 percent	1 percent
10 to 14 minutes	9 percent	9 percent	0 percent
15 to 19 minutes	11 percent	10 percent	-1 percent
20 to 29 minutes	6 percent	18 percent	12 percent
30 to 44 minutes	6 percent	30 percent	24 percent
45 or more minutes	2 percent	26 percent	24 percent

Census Tract 6749/TAZ 1945

Census tract 6702 is located in the central part of the county and includes parts of Houston. Riverview Street binds the tract to the north, the Brazos River to the west, Jackson Street to the south, and Pecan Grove to the east. The median household income is \$28,011 and the total population is 6,394.

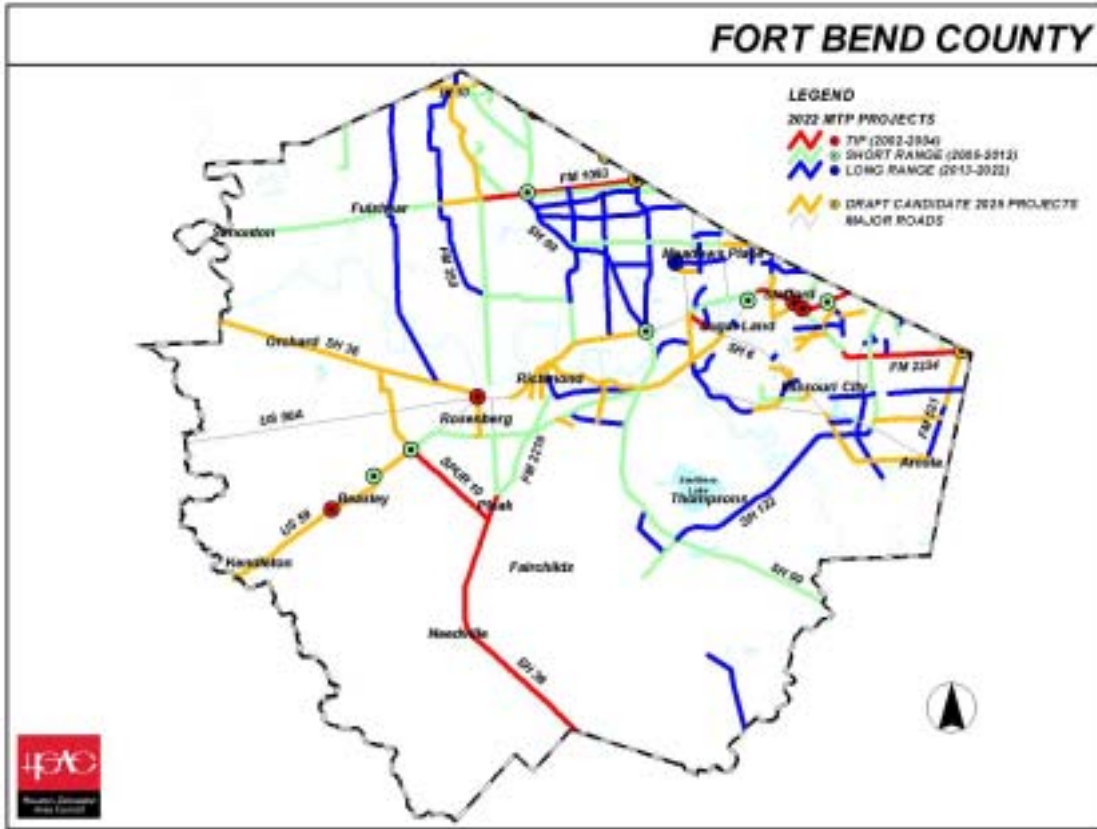
Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	55 percent	68 percent	13 percent
Black alone	13 percent	11 percent	-2 percent
Hispanic or Latino	31 percent	21 percent	-10 percent
Asian	.5 percent	.5 percent	0 percent
Other	.5 percent	.5 percent	0 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	17 percent	18 percent	1 percent
1 vehicle available	40 percent	35 percent	-5 percent
2 vehicles available	31 percent	35 percent	4 percent
3 or more vehicles available	12 percent	12 percent	0 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	33 percent	27 percent	-6 percent
16-24 years	16 percent	17 percent	1 percent
25-64 years	46 percent	49 percent	3 percent
65 and over	5 percent	7 percent	2 percent

Public Transportation in the Area

The Rosenberg/Richmond American Red Cross offers agency van transportation to Fort Bend county residents. Transportation is provided to individuals with medical appointments in Houston or Fort Bend County.



Galveston County

Galveston County is the southeastern most county in the Houston-Galveston eight-county transportation planning region. According to the 2000 Census, the population is 250,158, which has increased 15.1 percent from 1990. According to the CTPP, 7,874 households (8.3 percent of the county’s households) have no available vehicle and the median household income is \$42,419.

Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	14 percent	63 percent	49 percent
Black alone	67 percent	15 percent	52 percent
Hispanic or Latino	17 percent	18 percent	1 percent
Asian	2 percent	2 percent	0 percent
Other	>1 percent	2 percent	2 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	24 percent	24 percent	0 percent
16-24 years	12 percent	11 percent	-1 percent
25-64 years	51 percent	54 percent	3 percent
65 and over	10 percent	11 percent	1 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	10 percent	8 percent	2 percent
1 vehicle available	36 percent	35 percent	1 percent
2 vehicles available	39 percent	42 percent	2 percent
3 or more vehicles available	15 percent	15 percent	0 percent

Means of Transportation and Carpooling	1990 Census	2000 Census	Percent Change
Drove alone	77 percent	78 percent	1 percent
Carpooled	15 percent	14 percent	-1 percent
Public Transportation	1 percent	1 percent	0 percent
Bicycle or Walk	4 percent	3 percent	-1 percent
Other Means	3 percent	1 percent	-2 percent

Travel Time to Work	1990 Census	2000 Census	Percent Change
Less than 10 minutes	23 percent	14 percent	9 percent
10 to 14 minutes	16 percent	15 percent	-1 percent
15 to 19 minutes	17 percent	15 percent	-2 percent
20 to 29 minutes	5 percent	19 percent	14 percent
30 to 44 minutes	3 percent	20 percent	17 percent
45 or more minutes	3 percent	17 percent	14 percent

Census Tract 7251/TAZ 2567

Census Tract 7251 is in the southern part of Galveston County. The total population of the tract is 2,219 and the median household income is \$21,525.

Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	26 percent	18 percent	8 percent
Black alone	54 percent	57 percent	3 percent
Hispanic or Latino	19 percent	24 percent	4 percent
Asian	1 percent	0 percent	-1 percent
Other	0 percent	2 percent	2 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	17 percent	22 percent	5 percent
1 vehicle available	40 percent	43 percent	3 percent
2 vehicles available	31 percent	27 percent	4 percent
3 or more vehicles available	12 percent	8 percent	4 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	21 percent	22 percent	1 percent
16-24 years	11 percent	15 percent	4 percent
25-64 years	52 percent	48 percent	4 percent
65 and over	16 percent	15 percent	1 percent

Census Tract 7240/TAZ 1249

Census Tract 7240 extends beyond Pelican Island in Galveston County on the north, and is bounded by Ferry Road on the east, Harborside on the south, and IH-45 on the west. The total population of the tract is 1,959 and the median household income is \$10,505.

Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	1 percent	43 percent	42 percent
Black alone	49 percent	29 percent	-20 percent
Hispanic or Latino	50 percent	23 percent	-27 percent
Asian	0 percent	3 percent	3 percent
Other	0 percent	2 percent	2 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	69 percent	40 percent	-29 percent
1 vehicle available	26 percent	41 percent	15 percent
2 vehicles available	5 percent	14 percent	9 percent
3 or more vehicles available	1 percent	5 percent	4 percent

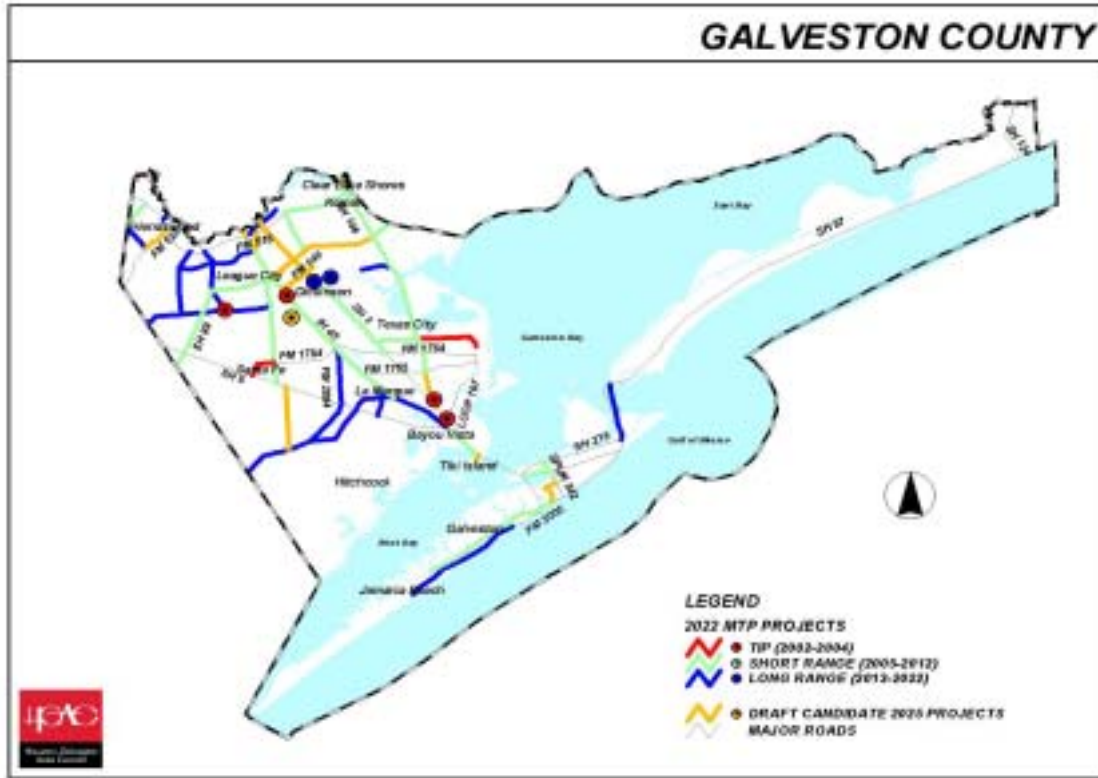
Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	41 percent	18 percent	-23 percent
16-24 years	13 percent	40 percent	27 percent
25-64 years	36 percent	33 percent	-3 percent
65 and over	10 percent	9 percent	-1 percent

Public Transportation in the Area

This area is served by Island Transit, the City of Galveston’s public transportation system. The Island Transit service area covers 27 square miles. Island Transit operates bus service and a trolley service in the area.

Studies/Projects in the Area

The City of Galveston completed a Feasibility Analysis (Modified MIS) for extending the trolley system from the downtown area to the University of Texas Medical Branch and farther to the Gulf of Mexico. The locally preferred alternative was adopted by H-GAC on July 27, 2001, and is included in the TIP for fiscal years 1999-2001 (Federal Transit Administration, 2002). The project total is \$4 million.



Liberty County

Liberty County is the northeastern most county in the Houston-Galveston eight-county transportation planning region. The total population in the county is 70,154, an increase of 33.1 percent since 1990. According to the CTPP, 1,766 households (7.6 percent of the county’s households) have no available vehicle, and the median household income is \$38,361.

Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	81 percent	75 percent	-6 percent
Black alone	13 percent	13 percent	0 percent
Hispanic or Latino	5 percent	11 percent	6 percent
Asian	.5 percent	<1 percent	.5 percent
Other	.5 percent	1 percent	.5 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	9 percent	8 percent	-1 percent
1 vehicle available	35 percent	34 percent	-1 percent
2 vehicles available	40 percent	42 percent	2 percent
3 or more vehicles available	16 percent	16 percent	0 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	26 percent	24 percent	-2 percent
16-24 years	12 percent	13 percent	1 percent
25-64 years	50 percent	53 percent	3 percent
65 and over	11 percent	10 percent	-1 percent

Means of Transportation and Carpooling	1990 Census	2000 Census	Percent Change
Drove alone	73 percent	79 percent	6 percent
Carpooled	20 percent	16 percent	-4 percent
Public Transportation	N/A	N/A	N/A
Bicycle or Walk	3 percent	1 percent	-2 percent
Other Means	4 percent	2 percent	-2 percent

Travel Time to Work	1990 Census	2000 Census	Percent Change
Less than 10 minutes	24 percent	14 percent	-10 percent
10 to 14 minutes	12 percent	15 percent	3 percent
15 to 19 minutes	13 percent	15 percent	2 percent
20 to 29 minutes	2 percent	19 percent	17 percent
30 to 44 minutes	3 percent	20 percent	17 percent
45 or more minutes	5 percent	17 percent	12 percent

Census Tract 7002/TAZ 2332

Census tract 7002 was selected to provide a sketch of trip making determinants for low-income households, zero automobile households and minority households. This census tract is in the town of Cleveland. This tract is bounded by railroad tracks (line unidentified) on the north, Houston Street on the south, Tarkington Stream/River on the east, and San Jacinto Street on the west.

Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	32 percent	35 percent	3 percent
Black alone	61 percent	52 percent	-9 percent
Hispanic or Latino	7 percent	11 percent	4 percent
Asian	.5 percent	1 percent	.5 percent
Other	.5 percent	1 percent	.5 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	32 percent	21 percent	-11 percent
1 vehicle available	40 percent	51 percent	11 percent
2 vehicles available	23 percent	21 percent	-3 percent
3 or more vehicles available	5 percent	7 percent	2 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	25 percent	20 percent	-5 percent
16-24 years	15 percent	15 percent	0 percent
25-64 years	45 percent	51 percent	6 percent
65 and over	15 percent	14 percent	-1 percent

Census Tract 7003/TAZ 2285

Census Tract 7003 is in the western part of the county and contains Plum Grove. The median household income is \$39,360 and the total population is 8,184.

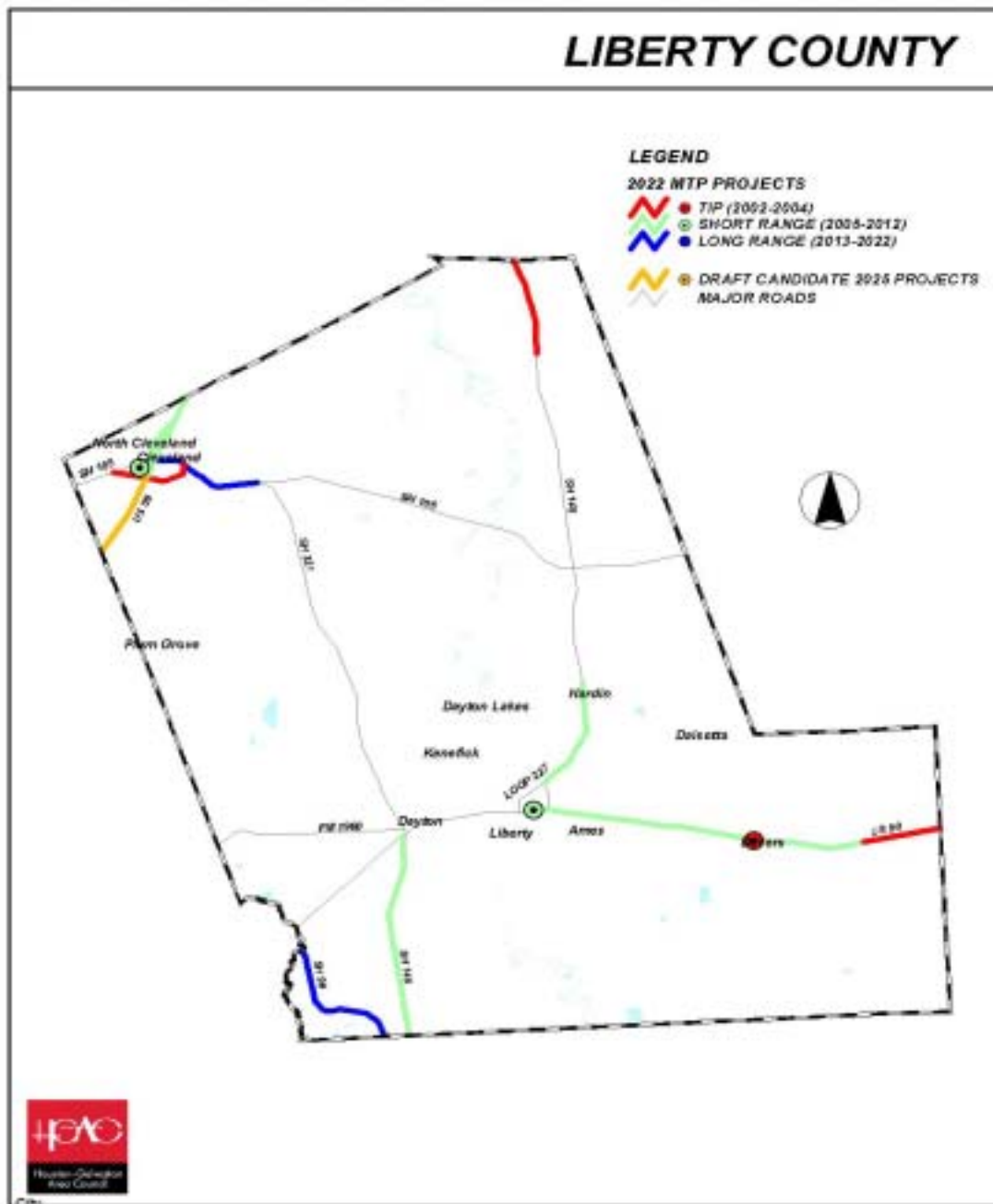
Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	26 percent	76 percent	50 percent
Black alone	54 percent	5 percent	-49 percent
Hispanic or Latino	19 percent	17 percent	-2 percent
Asian	1 percent	.5 percent	-.5 percent
Other	0 percent	1 percent	1 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	8 percent	6 percent	-2 percent
1 vehicle available	36 percent	35 percent	-1 percent
2 vehicles available	40 percent	42 percent	2 percent
3 or more vehicles available	16 percent	17 percent	1 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	21 percent	25 percent	4 percent
16-24 years	11 percent	15 percent	5 percent
25-64 years	52 percent	49 percent	-3 percent
65 and over	16 percent	11 percent	-5 percent

Public Transportation in the Area

The area of analysis is served by the Brazos Transit District’s Cleveland Community Routes, a circulator service serving Cleveland. There is no transportation/mobility plan for Liberty County.



Montgomery County

Montgomery County is in the northeastern part of the Houston-Galveston eight-county transportation planning region. The total population is 294,000 and the county has a median annual income of \$50,864. According to the CTPP, 4,817 households (5 percent of the county’s households) have no available vehicle.

Race/Ethnicity	1990 Census	2000 Census	Percent Change
White alone	88 percent	82 percent	-6 percent
Black alone	4 percent	4 percent	0 percent
Hispanic or Latino	7 percent	13 percent	6 percent
Asian	1 percent	.5 percent	-.5 percent
Other	.5 percent	1 percent	.5 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No vehicle	5 percent	5 percent	0 percent
1 vehicle available	30 percent	29 percent	-1 percent
2 vehicles available	45 percent	48 percent	3 percent
3 or more vehicles available	20 percent	18 percent	-2 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	27 percent	26 percent	-1 percent
16-24 years	12 percent	11 percent	-1 percent
25-64 years	53 percent	54 percent	1 percent
65 and over	9 percent	9 percent	0 percent

Means of Transportation and Carpooling	1990 Census	2000 Census	Percent Change
Drove alone	78 percent	81 percent	3 percent
Carpooled	16 percent	1 percent	-15 percent
Public Transportation	1 percent	1 percent	0 percent
Bicycle or Walk	4 percent	1 percent	-3 percent
Other Means	1 percent	1 percent	0 percent

Travel Time to Work	1990 Census	2000 Census	Percent Change
Less than 10 minutes	9 percent	10 percent	1 percent
10 to 14 minutes	11 percent	11 percent	0 percent
15 to 19 minutes	12 percent	12 percent	0 percent
20 to 29 minutes	4 percent	14 percent	10 percent
30 to 44 minutes	4 percent	23 percent	19 percent
45 or more minutes	4 percent	30 percent	26 percent

Census Tract 6931/TAZ 2188

Census Tract 6931 is in the central part of the county. The City of Conroe is partially included in the tract. The total population of the tract is 8,799 and the median household income is \$30,607.

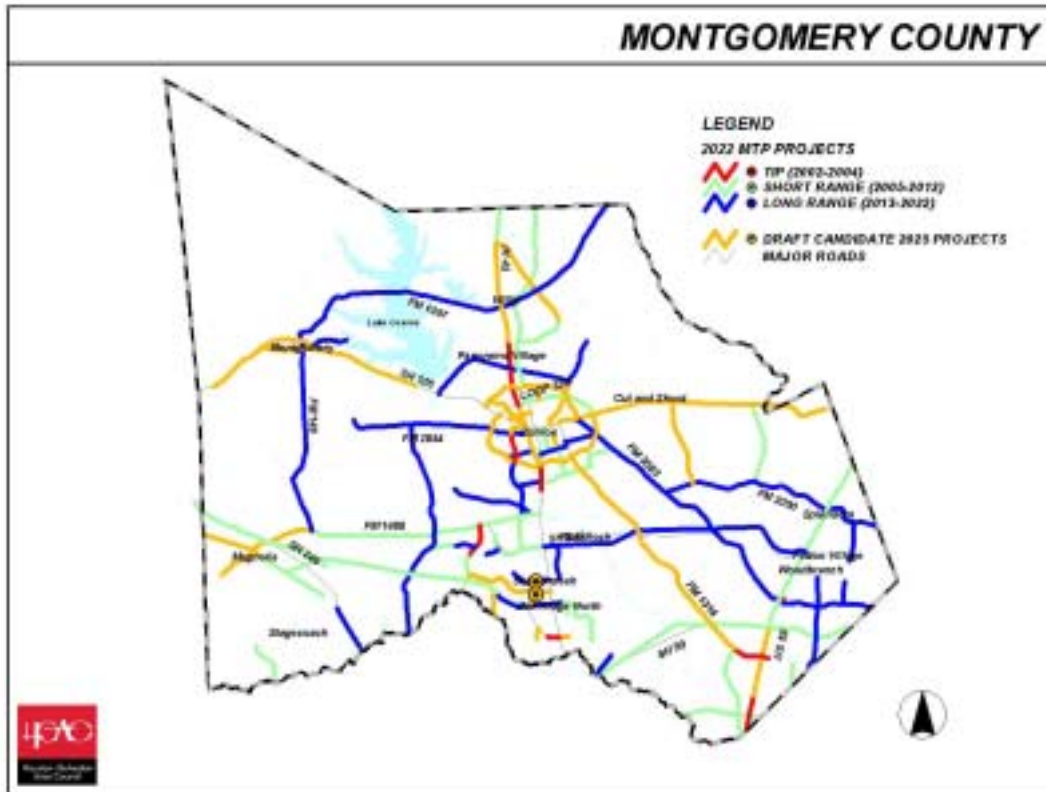
Race/Ethnicity	1990 Census	2000 Census	Percent Change
White Alone	52 percent	35 percent	-17 percent
Black Alone	30 percent	22 percent	-8 percent
Hispanic or Latino	16 percent	41 percent	25 percent
Asian	1 percent	1 percent	0 percent
Other	.5 percent	1 percent	.5 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No Vehicle	14 percent	12 percent	-2 percent
1 vehicle available	40 percent	38 percent	-2 percent
2 vehicles available	32 percent	37 percent	5 percent
3 or more vehicles available	14 percent	13 percent	-1 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	29 percent	28 percent	-1 percent
16-24 years	14 percent	18 percent	4 percent
25-64 years	46 percent	47 percent	1 percent
65 and over	11 percent	7 percent	-4 percent

Public Transportation in the Area

Montgomery County is served by Park and Ride lots, which are provided by Houston's Metropolitan Transit Authority (METRO). The Eastex Station serves the southern portion of the area, and the Kingwood Station is located to the north.



Waller County

Waller County is in the northeastern part of the Houston-Galveston eight-county transportation planning region. The total population is 32,663 and the county has a median annual income of \$38,136. According to the CTPP, 749 households (7.1 percent of the county’s households) have no available vehicle.

Race/Ethnicity	1990 Census	2000 Census	Percent Change
White Alone	51 percent	50 percent	-1 percent
Black Alone	37 percent	29 percent	-8 percent
Hispanic or Latino	11 percent	19 percent	8 percent
Asian	.5 percent	1 percent	.5 percent
Other	.5 percent	1 percent	.5 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No Vehicle	9 percent	7 percent	-2 percent
1 vehicle available	35 percent	34 percent	-1 percent
2 vehicles available	39 percent	41 percent	2 percent
3 or more vehicles available	17 percent	18 percent	1 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	3 percent	23 percent	23 percent
16-24 years	6 percent	21 percent	15 percent
25-64 years	1 percent	47 percent	46 percent
65 and over	10 percent	9 percent	-1 percent

Means of Transportation and Carpooling	1990 Census	2000 Census	Percent Change
Drove Alone	69 percent	74 percent	5 percent
Carpooled	18 percent	17 percent	-1 percent
Public Transportation	.5 percent	.5 percent	0 percent
Bicycle or Walk	5 percent	4 percent	-1 percent
Other Means	8 percent	1 percent	-7 percent

Travel Time to Work	1990 Census	2000 Census	Percent Change
Less than 10 minutes	13 percent	16 percent	3 percent
10 to 14 minutes	14 percent	12 percent	-2 percent
15 to 19 minutes	13 percent	12 percent	-1 percent
20 to 29 minutes	3 percent	11 percent	8 percent
30 to 44 minutes	3 percent	15 percent	12 percent
45 or more minutes	3 percent	34 percent	31 percent

Census Tract 6803/TAZ 2027

Census tract 6803 is bound by State Highway 290 on the northwest and includes the town of Pine Island. The total population of the tract is 7,914 and the median household income is \$39,846.

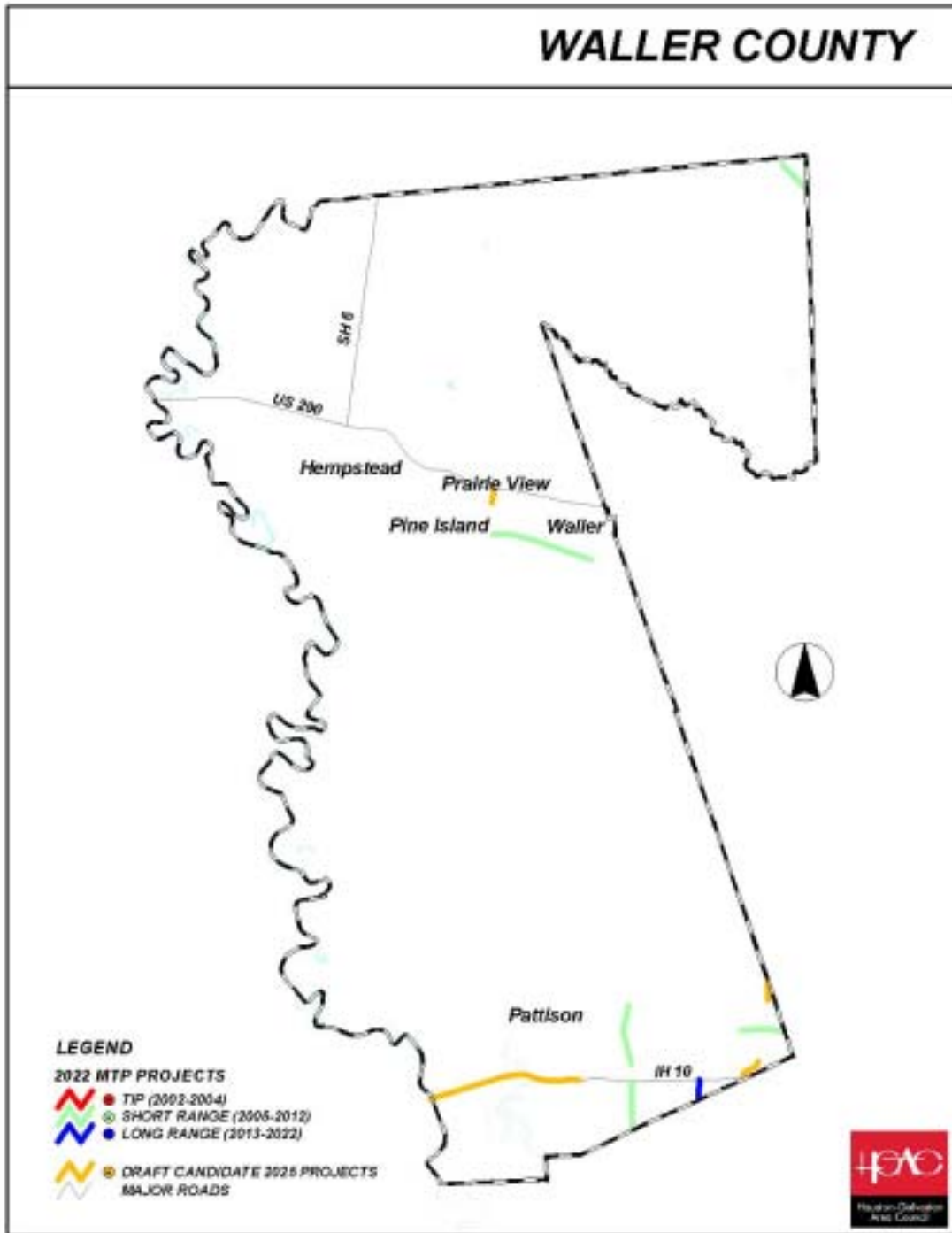
Race/Ethnicity	1990 Census	2000 Census	Percent Change
White Alone	7 percent	50 percent	43 percent
Black Alone	34 percent	30 percent	-4 percent
Hispanic or Latino	59 percent	18 percent	-41 percent
Asian	0 percent	1 percent	1 percent
Other	0 percent	1 percent	1 percent

Vehicles Available	1990 Census	2000 Census	Percent Change
No Vehicle	9 percent	6 percent	-3 percent
1 vehicle available	36 percent	33 percent	-3 percent
2 vehicles available	38 percent	43 percent	5 percent
3 or more vehicles available	17 percent	18 percent	1 percent

Age of Population	1990 Census	2000 Census	Percent Change
Under 16 years	17 percent	23 percent	-6 percent
16-24 years	42 percent	41 percent	-1 percent
25-64 years	31 percent	49 percent	18 percent
65 and over	9 percent	10 percent	1 percent

Public Transportation in the Area

Fort Bend Senior Citizens, Inc. and Colorado Valley Transit, Inc. serve the population of Waller County. Colorado Valley Transit provides transportation services and Fort Bend Senior Citizens provides services for the county’s aging population including, congregate meals, home-delivered meals, information and assistance.



Travel Times by Mode for Selected TAZs

The following table displays travel times to MACs for selected TAZs. The table also displays county average travel times to the same destinations.

Brazoria County	CBD	Uptown	TMC	GP
TAZ 1659 Travel Time by Auto	38.6	42.7	35.1	39.5
TAZ 1659 Travel Time by Transit	44.8	80.2	59.9	59.0
Avg. County Travel Time by Auto	38.6	39.5	42.7	35.1
Avg. County Travel Time by Transit	44.8	80.2	59.9	59.0

Chambers County	CBD	Uptown	TMC	GP
TAZ 2376 Travel Time by Auto	52.3	63.5	60.5	60.8
TAZ 2376 Travel Time by Transit	N/A	N/A	N/A	N/A
Avg. County Travel Time by Auto	49.5	59.8	57.4	57.7
Avg. County Travel Time by Transit	N/A	N/A	N/A	N/A

Fort Bend County	CBD	Uptown	TMC	GP
TAZ 1945 Travel Time by Auto	48.2	42.9	47.1	41.5
TAZ 1945 Travel Time by Transit	60.3	65.8	85.3	58.3
Avg. County Travel Time by Auto	36.7	32.7	34.1	31.5
Avg. County Travel Time by Transit	56.7	79.3	70.5	67.3

Galveston County	CBD	Uptown	TMC	GP
TAZ 2567 Travel Time by Auto	56.0	N/A	N/A	66.0
TAZ 2567 Travel Time by Transit	N/A	N/A	N/A	N/A
Avg. County Travel Time by Auto	34.0	10.7	N/A	N/A
Avg. County Travel Time by Transit	48.4	78.9	65.4	65.3

Harris County	CBD	Uptown	TMC	GP
TAZ 975 Travel Time by Auto	25.2	17.3	24.7	17.3
TAZ 975 Travel Time by Transit	72.3	65.9	84.3	70.0
Avg. County Travel Time by Auto	25.3	24.5	24.9	24.4
Avg. County Travel Time by Transit	56.2	69.4	63.4	67.6

Liberty County	CBD	Uptown	TMC	GP
TAZ 2285 Travel Time by Auto	53.4	65.3	62.0	63.0
TAZ 2285 Travel Time by Transit	N/A	N/A	N/A	N/A
Avg. County Travel Time by Auto	57.5	68.0	66.9	65.9
Avg. County Travel Time by Transit	53.0	108.0	43.0	100.0

Montgomery County	CBD	Uptown	TMC	GP
TAZ 2188 Travel Time by Auto	47.9	60.8	57.4	57.6
TAZ 2188 Travel Time by Transit	61.9	121.2	79.4	84.3
Avg. County Travel Time by Auto	45.2	55.5	54.6	54.9
Avg. County Travel Time by Transit	60.6	97.2	86.7	82.0

Waller County	CBD	Uptown	TMC	GP
TAZ 2027 Travel Time by Auto	55.9	57.8	66.0	59.5
TAZ 2027 Travel Time by Transit	N/A	N/A	N/A	N/A
Avg. County Travel Time by Auto	53.6	55.7	63.6	56.4
Avg. County Travel Time by Transit	77.1	153.0	105.0	139.0