



Image Source: Halff Associates, Inc.

existing conditions



The bicycle is a curious vehicle. Its passenger is its engine.

*~John Howard,
Legendary Bicycle Racer*



Avenue B cycle track near Broadway



Riding on an improved shoulder

THE CURRENT STATE OF BICYCLING IN SAN ANTONIO

San Antonio has made tremendous progress in building a bicycle network over the past decade, adding over 175 miles of bicycle lanes, multi-use paths, and bicycle routes. Consistent funding for bicycle facilities is now more certain, even if still not enough to have a major impact. More importantly, the City of San Antonio now strives to integrate bicycle network improvements through regular maintenance of the roadways and bond funded projects such as street restriping and repaving. A significant off-street multi-use path network (managed by Parks and Recreation Department) has been supported by San Antonians through sales tax initiative and the Parks and Recreation Department, and is being constructed. As of December 2010, the San Antonio-Bexar County region has a total of 585 miles of bicycle facilities, including bicycle lanes, bicycle routes, multi-use paths, and wide shoulders.

However, the bicycle network in San Antonio continues to have many gaps, and documented ridership remains relatively low. This chapter quantifies where San Antonio is today, who is riding, and what San Antonio and Bexar County residents have said about their concerns and desires regarding bicycling in the area.

THE BIG PICTURE - HOW DOES SAN ANTONIO COMPARE TO OTHER CITIES IN TEXAS AND ACROSS THE U.S.?

Geographic Area and Density - San Antonio and Bexar County cover a large area. The City of San Antonio itself covers more than 515 square miles, and Bexar County incorporates more than 1,300 square miles. Even with a current regional population of over 1.6 million residents, San Antonio still has one of the lowest developed densities of any major city. Among Texas' largest cities, San Antonio has the second lowest density per square mile with just under 2,600 residents per square mile. Only Fort Worth has a lower population density. Houston and Dallas exceed San Antonio's density by almost 30%.

Cities with more residents per square mile have higher levels of bicycling and walking, on average, than less dense cities. Boston, Washington, DC, San Francisco, and New York, the cities with the highest combined rates of bicycling and walking, are also among the top seven densest cities. The least dense cities, including Oklahoma City, Jacksonville, Nashville, and Kansas City, are

among the cities with the lowest levels of bicycling and walking.

San Antonio and the surrounding region has a long way to go to connect the 1,300 square-mile region by bicycle. Less than 6% of the roadways in the entire study area have an on-street facility; and an even lower share of the roads in the City of San Antonio (2.8%) have an on-street bicycle facility.

The 2010 Benchmarking Report by the Alliance for Biking and Walking looked at bicycling and walking trends in the 50 largest U.S. cities, including San Antonio. Among the most notable statistics of bicycling in San Antonio include:

- On average, cities have 1.6 miles of bicycle facilities (bike lanes, multi-use paths, and signed bicycle routes) per square mile. In the San Antonio-Bexar County region, there are 0.16 miles of bicycle lanes, paths, and signed routes per square mile of the area.¹ In more urbanized areas, this increases: within the city limits of San Antonio, there are 0.3 miles of bicycle facilities per square mile, and within the dense area inside Loop 410, there are 0.55 miles per square mile. The density of bicycle facilities is still 66% lower than the national average.
- Among all trips taken in San Antonio, approximately 0.5% of them are made by bicycling. This compares to an average of 0.94% among major U.S. cities
- San Antonio ranks 41 among 51 major cities for bicycling and walking levels combined.
- San Antonio ranks 36 among major cities for per capita funding for bicycle and pedestrian facilities.
- San Antonio ranks 45 among major cities for bicycling to work (based on the travel to work data from American Community Survey, 2007), with under one-tenth of one percent of all commuters choosing bicycles as a way to get to work on a regular basis. Only El Paso ranked lower in Texas. Portland, Minneapolis, San Francisco, Seattle and Tucson were the highest five in the United States.
- San Antonio ranks 44 among major cities for bicycle safety, based on a calculation of the fatality rate.²

¹ Alliance for Biking and Walking, Bicycling and Walking in the United States: 2010 Benchmarking Report, 2010

² Alliance for Biking and Walking, Bicycling and Walking in the United States: 2010 Benchmarking Report, 2010





COMPARISON OF CITY SIZE AND POPULATIONS



San Antonio, TX

Area: 515 sq mi
 Population: 1,300,000
 Density: 2,542 persons per sq mi
 Bicycle Mode Use: 0.5%



Austin, TX

Area: 307 sq mi
 Population: 812,000
 Density: 2,644 persons per sq mi
 Bicycle Mode Use: 0.9%



Minneapolis, MN

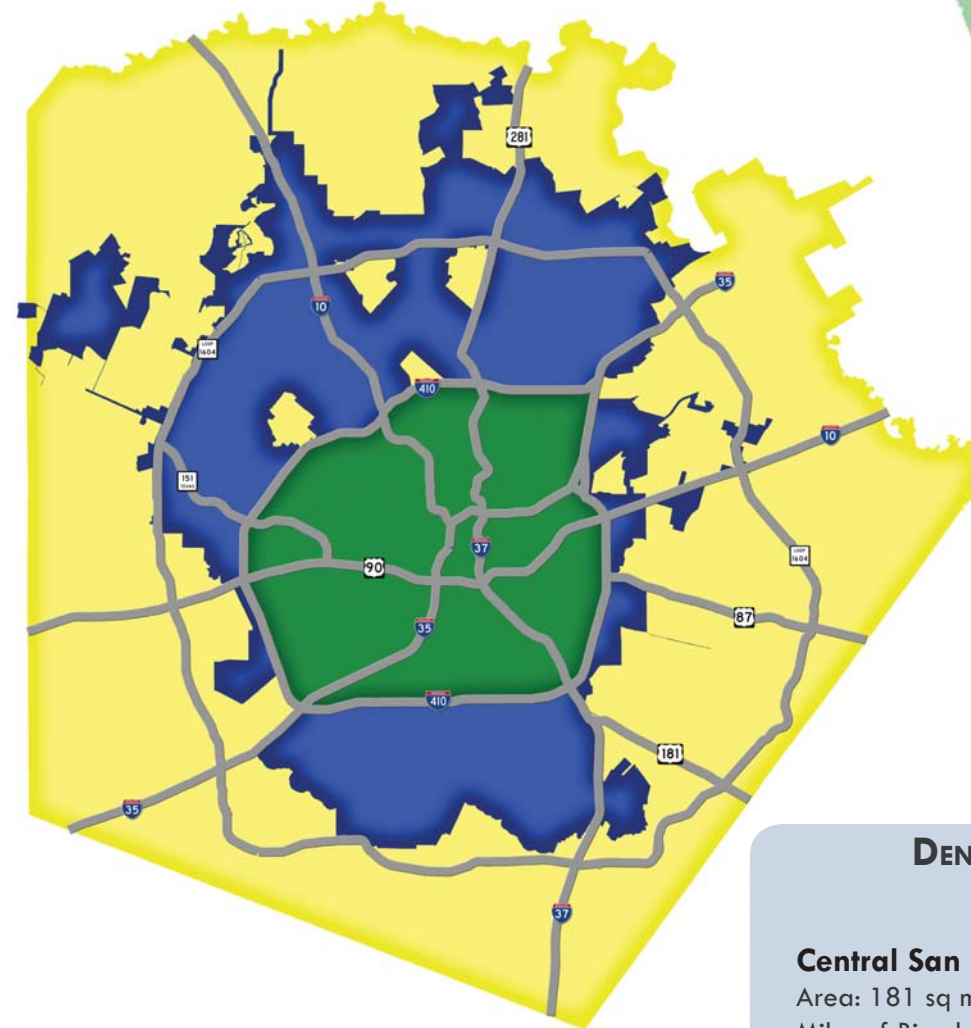
Area: 58 sq mi
 Population: 645,000
 Density: 6,596 persons per sq mi
 Bicycle Mode Use: 3.8%



Portland, OR

Area: 145 sq mi
 Population: 583,000
 Density: 4,288 persons per sq mi
 Bicycle Mode Use: 3.9%

BICYCLE FACILITY DENSITY BY AREA OF SAN ANTONIO REGION



**DENSITY OF BICYCLE FACILITIES
 IN SAN ANTONIO**

Central San Antonio (area inside Loop 410)

Area: 181 sq mi
 Miles of Bicycle Facilities: 100
 Bicycle Facility Density: 0.55 miles per sq mi

City of San Antonio (area beyond Loop 410)

Area: 334 sq mi
 Miles of Bicycle Facilities: 54
 Bicycle Facility Density: 0.16 miles per sq mi

**San Antonio-Bexar County MPO
 (area outside City of San Antonio)**

Area: 535 sq mi
 Miles of Bicycle Facilities: 47
 Bicycle Facility Density: 0.08 miles per sq mi

Data Sources:
 GIS: City of San Antonio; City of Austin; MetroGIS DataFinder (Minneapolis); and City of Portland
 Area & Population Estimates: U.S. Census Bureau
 Bicycle Mode Use: Alliance for Biking and Walking, 2010 Benchmarking Report



THE STATE OF BICYCLE ADVOCACY & IMPLEMENTATION IN SAN ANTONIO

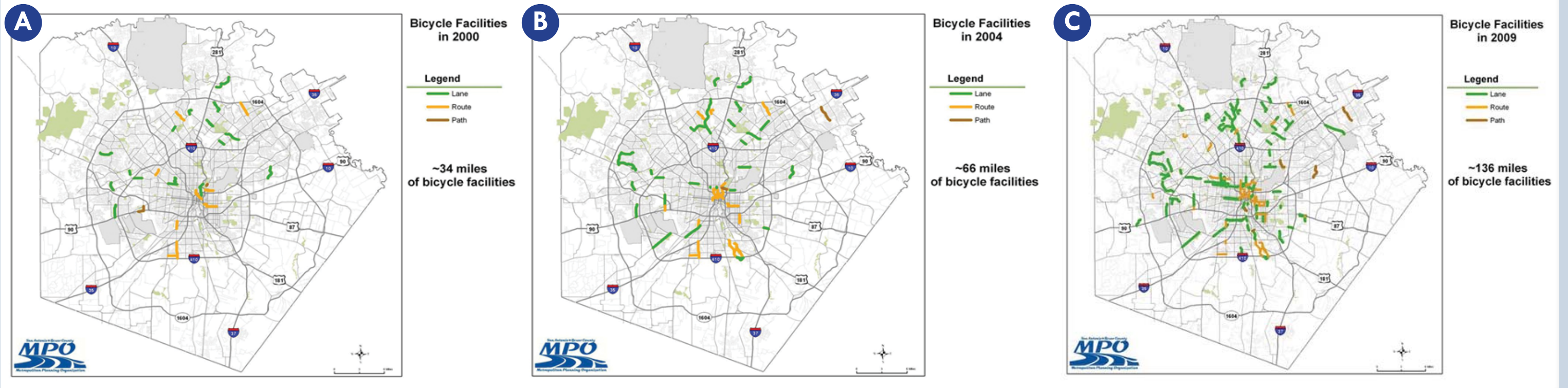
There are a number individuals and groups actively supporting bicycling in San Antonio, helping the 2004 Bicycle Master Plan move forward, and contributing valuable information to make Bike Plan 2011 a superior plan for bicycling. The Bicycle Mobility Advisory Committee (BMAC) is the primary bicycling voice in the region. Housed in and staffed by the MPO, this group has been meeting since September 2006, and consists of agency staff and advocacy representatives who affect or are affected by decisions on bicycling. Bringing these representatives together provides a sounding board for bicycle constituents and is the underpinning of a comprehensive dialogue about the issues of bicycling at a regional scale.

A number of bicycling groups and bicycle shops throughout the San Antonio region have gone beyond their role as just a retailer of cycling goods and participate in BMAC as well as actively engage the bicycling community through group rides, bike maintenance and safety classes, and participation in the City's and region's efforts to improving bicycling.

Finally, bicycling dialogue among City departments is strengthening. Based on a recommendation of the 2004 Bicycle Master Plan, the City's first full time bike coordinator was hired in April 2005. In August 2008, the position was moved to the newly established Office of Environmental Policy. There are several City departments who are engaged in bicycle planning and facility and program implementation, including OEP, Public Works, Parks and Recreation, Metro Health, and CIMS. Departments often report to different Assistant City Managers, and this organizational structure has

the potential to result in contradicting directives. However, with bicycle planning and implementation being done in multiple departments, there are more opportunities for horizontal collaboration across these departments, not to mention sharing project funding from multiple sources. For this reason, it is crucial that there is constant communication and collaboration among the various City staff.

GROWTH IN BICYCLE FACILITIES IN SAN ANTONIO AND BEXAR COUNTY, 2000-2009



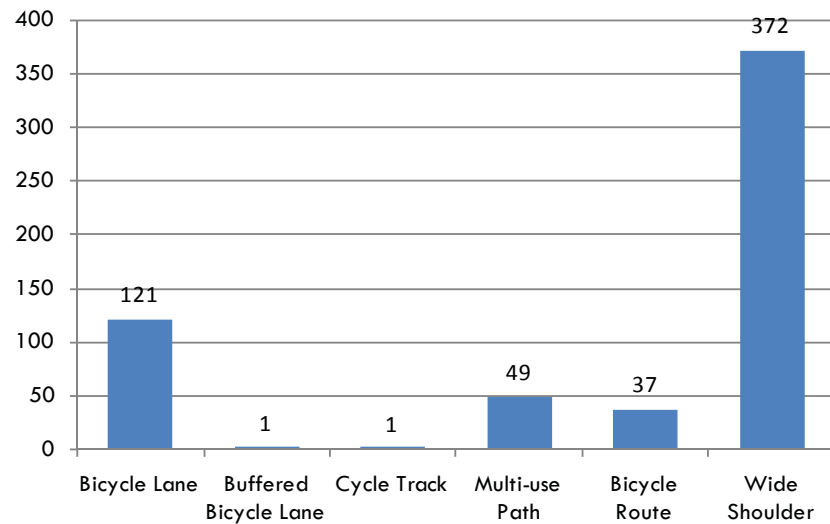
Map Source: San Antonio-Bexar County MPO

EXISTING BICYCLE INFRASTRUCTURE IN SAN ANTONIO

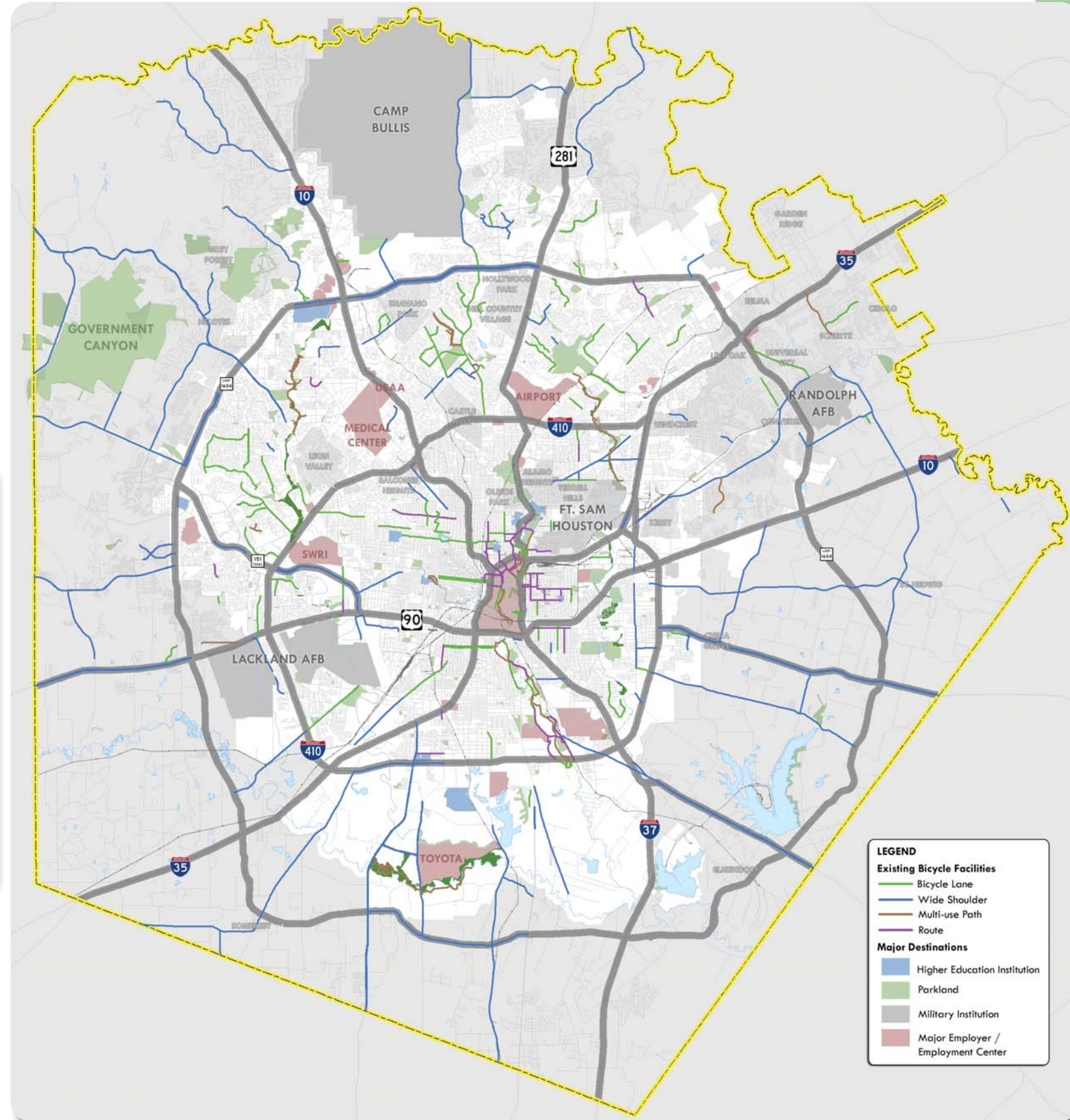
The current network has grown significantly over the past few years. Figures A, B and C on the previous page illustrate the growth of the system since 2000. In 2000 only 34 miles of bicycle facilities were in place. By 2009, more than 136 miles of facilities were available, an increase of 400%.

Today, San Antonio and Bexar County currently have approximately 585 miles of bicycle facilities or roadways that have a suitable service level for bicycle riding. The existing system includes a variety of types of bicycle facilities. The chart below indicates the total mileage of each facility type, and the map to the right illustrates the location of the existing facilities.

Miles of Existing Bicycle Facilities
 Entire Study Area



EXISTING BICYCLE FACILITIES: LANES, SHOULDERS, ROUTES, AND MULTI-USE PATHS





EXISTING CHALLENGES AND BARRIERS TO BICYCLING IN SAN ANTONIO

Gaps - Roadway and Bicycle Network Discontinuity

Despite having 585 miles of bicycle facilities in the San Antonio-Bexar County region, there are still significant gaps in the bicycle network, leading to a disconnected bicycle network that is difficult to use and uninviting. Considering there are over 4,000 miles of existing roadways, there are many opportunities to continue on-street bicycle facilities as well as make connections from the Greenway Trails and San Antonio River trail systems to on-street facilities and to neighborhoods.

Development Patterns

The street pattern has a significant impact on bicyclist mobility and the types of facilities that can be considered. There are two primary and distinct street patterns in San Antonio: the older, gridded street network inside of Loop 410, and the newer, curvilinear street network in the suburban areas of San Antonio outside of Loop 410. The gridded street network is defined by redundant route options for cars and bicycles alike to travel, allowing traffic to disperse across the network. More recent transportation practices led to the identification of collectors within this network; even so, the gridded network still gives travelers an option. Because of this, not only do cars have options when traffic congestion builds, but bicyclists also have a choice to choose routes with lower vehicle volumes. Additionally, streets in the older parts of San Antonio are narrower, and cars tend to drive slower.



Conversely, the area outside of Loop 410 has a street system that is less connected. Streets are curvilinear and the hierarchy among arterials, collectors, and local streets is much more defined and cars funnel to and collect on specific streets. Because of the disconnectedness of this street system, bicyclists are also required to use those same collectors.

The different street patterns require different approaches in accommodating bicyclists. For example, in the older areas, because there are many options for travel, prioritizing bicycle over motor vehicles on selected streets is feasible because there are alternative, parallel streets for the automobile to use. This technique is not feasible in much of the suburban areas outside of Loop 410 because the land uses and corresponding roadway network constrains travel for entire areas of the city to use a limited number of routes. Similarly, the concentration of all

roadway users on a limited number of arterial and collector streets demands the consideration of dedicated non-motorized facilities such as off-street, multi-use paths in preference to bicyclists sharing the street with high vehicular speeds and volumes.

Physical Barriers

Physical barriers is another cause for network discontinuity. Across San Antonio, there are a number of barriers that deter people from bicycling. The most significant barriers include:

- Freeways, or major highways, and railroad lines that do not have bicycle-friendly crossings
- Rail yards and industrial zones
- Major intersections of arterial roads that have difficult intersections and challenging traffic conditions

Facility Maintenance

Throughout the city are signs of an aging and neglected bicycle network. Bicycle facilities aren't effective if they're inadequate and decaying, especially when the paint on the pavement is the only physical indicator that there is a bicycle facility present. Obstacles also contribute to the quality of the bicycle network. Parked cars, trash cans, and debris may render a bicycle facility futile. Obstructing bicycle lanes and paths can be dangerous to cyclists, creating an inconsistent and unpredictable environment for automobiles and bicyclists alike, as bicyclists are forced to navigate around obstructions.

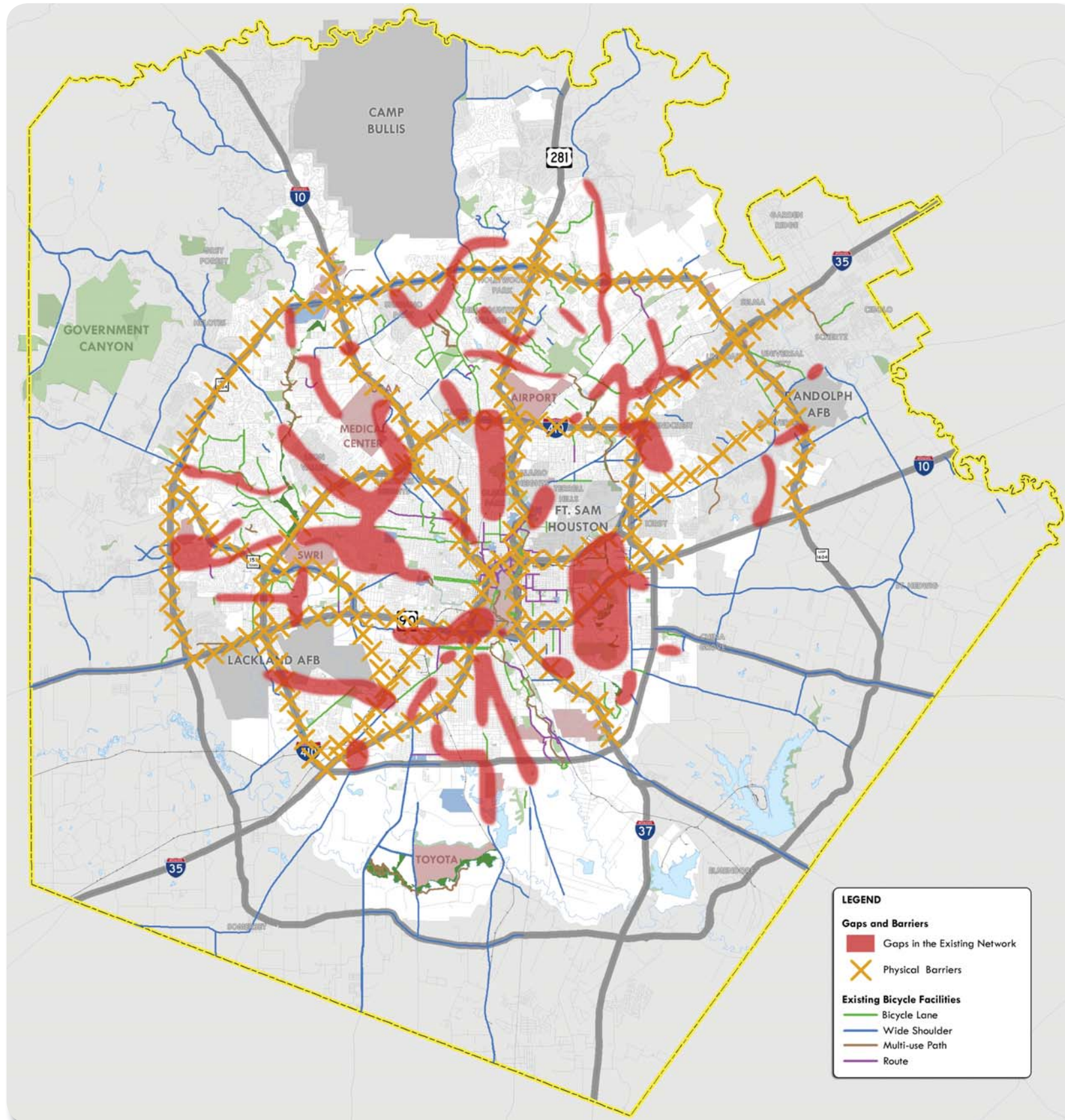
Parking in Bicycle Lanes

Another challenge with the existing bicycle network in San Antonio is the allowance of on-street parking in bicycle lanes. What further exacerbates this problem in San Antonio is the number of neighborhood collectors that have homes fronting on them. Along these streets, traffic conditions (vehicle speed and traffic volumes) may warrant a bicycle lane; however, with homes fronting on the street, there is demand for on-street parking as well.

This is an issue not only for the existing bicycle lanes where on-street parking occurs, but also along corridors with permitted on-street parking where new bicycle lane facilities are proposed. In addressing this issue, there are several possible solutions for either modifying the on-street parking or deciding to remove the bicycle lane and relocate the route.



GAPS AND BARRIERS IN THE EXISTING BICYCLE NETWORK



Facility Proximity

While bicycle improvements are often installed in places where people already ride and demand a facility, bicycle facilities can also generate bicycle use. Evaluating the network based on geographic distribution highlights areas that lack bicycle facilities as well as gaps in the existing network. The map to the left identifies gaps, barriers, and larger areas that are underserved by bicycle facilities.

A Need for a Stronger Culture for Bicycling

The culture for bicycling has begun to shift in San Antonio, providing an opportunity to affect change in attitudes and policy regarding bicycling. The primary outlet for bicyclists in San Antonio is the Bicycle Mobility Advisory Committee (BMAC), which is housed in the regionally-focused Metropolitan Planning Organization and meets monthly. Since its inception in 1996, the BMAC has become a strong voice for bicycling in the San Antonio region and seen the realization of a growing bicycle network and increased acceptance of bicycling into the culture. Still, the region faces a long road of integrating bicycling into the transportation fabric in San Antonio

Need for Accountability

While the BMAC is a strong and energetic voice for bicycle issues, its role is purely advisory to the policy board, leaving little accountability for local jurisdictions to follow through with implementation of policy, programs, or infrastructure. The region faces a significant challenge of elevating the perception of bicycling as an integral component of a balanced transportation system - to the general public as well as to regional leaders. The BMAC, recreational groups, and the advocacy community are well aware of the community benefits of bicycling. However, not everyone in San Antonio is yet persuaded that bicycling is an economical, healthy, environmentally-sound, and fun form of transportation.

Need for Leadership

Often, decisions are made that conflict with recommendations for regional and local objectives to improve bicycling. Examples of this include roadway projects where bicycle facilities are sacrificed under budget constraints; policies that focus on improving the mobility of automobiles at the cost of bicycle safety; excluding the maintenance of bicycle facilities as a part of the general maintenance of roadways; and limited annual funding allocated from the general budget for new bicycle facilities. By integrating the goals of bicycling into the policies of the City and region, decisions among the region's leaders will reflect the goals for bicycling as laid out in the bicycle master plan. These upper level decisions will then trickle down and result in stronger, more consistent implementation for bicycle infrastructure and programs, and an overall stronger culture for bicycling for San Antonio.





BICYCLE SAFETY IN SAN ANTONIO

As bicycling increases in the region, it becomes even more important that safety and awareness are addressed. San Antonio has made recent efforts to improve bicycle safety in preparation of increasing the number of bicyclists. In 2010, the City of San Antonio adopted two ordinances to improve bicycle safety:

- **Bike Light Ordinance** - This ordinance requires a front white light, and rear red reflector or red rear light on a bicycle. It reinforces the State of Texas law requirements for bicycle lights.
- **Safe Passing Ordinance** - This ordinance sets a requirement of safe passing by motor vehicles for vulnerable road users. Safe passing distance is defined as 3' for cars and 6' for commercial or large trucks (only applies when road conditions allow).

2010 Regional Safety Study - Crash Statistics

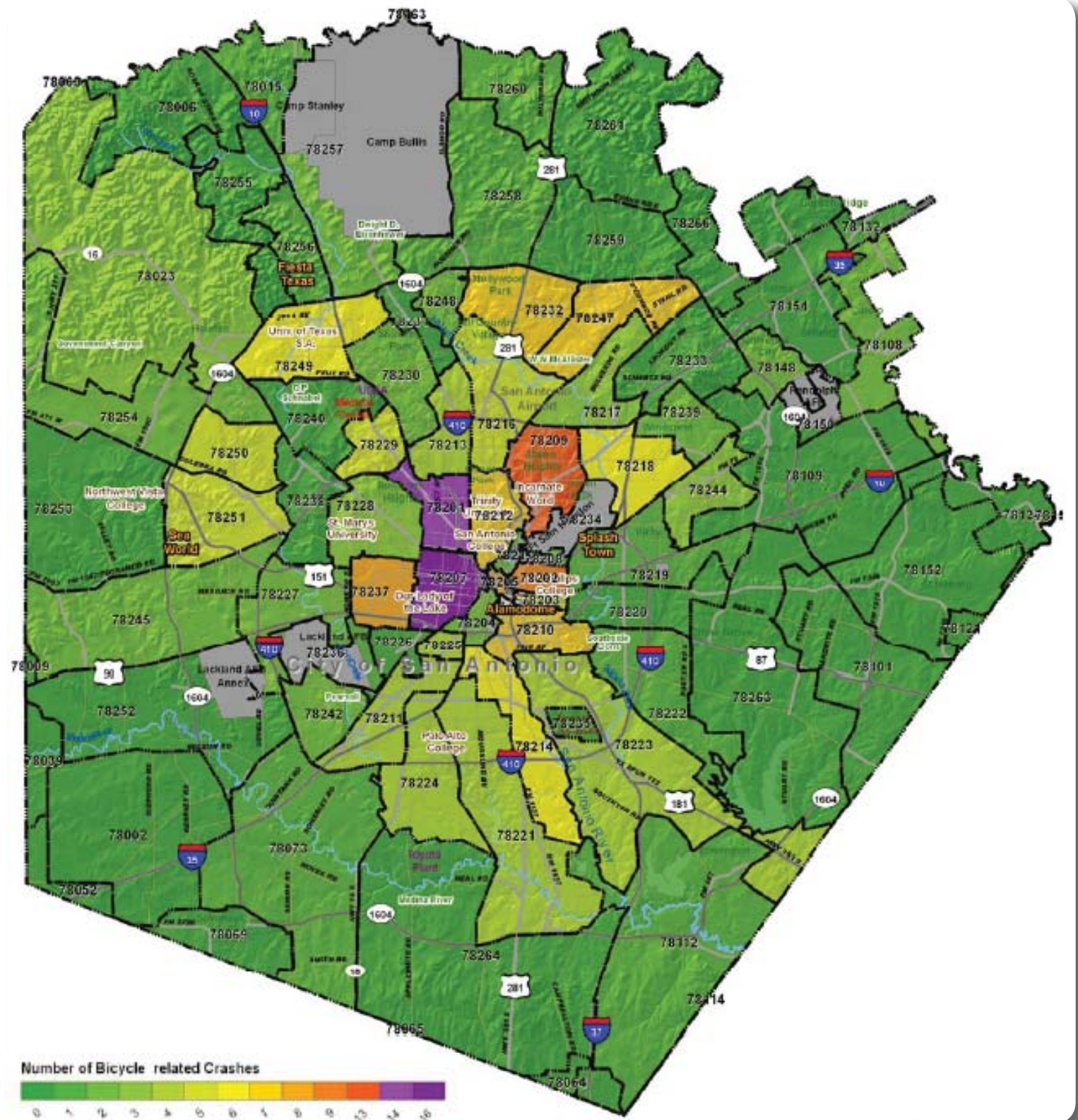
Additionally, the San Antonio-Bexar County MPO conducted a Regional Safety Study to identify causes for bicycle crashes and inform efforts to improve bicycle safety. The Regional Safety Study reviewed 2008 crash data from the Texas Crash Records Information System and conducted a safety survey. Below are major findings of this report:

- In 2008, there were a total of 205 bicycle crashes, which accounted for 0.4% of all crashes that year in the San Antonio Bexar County area.
- The majority of bicycle crashes were later in the afternoon and early in the evening when there are many cyclists out riding and more vehicles on the road.

The MPO's Safety Program did a more detailed review of the data identified additional characteristics of bicycle crashes in the region:

- Average of 2.3 fatalities from bicycle crashes per year over last 6 years
- Average of 148 crashes with injuries per year over past 3 years (total of 443)
- 90% of the regional bicycle crashes occurred in San Antonio
- 62% of the regional crashes occurred inside Loop 410
- 12.7% wore helmets, 12.7% unknown helmet usage, 75% no helmet

BICYCLE CRASH DATA BY ZIP CODE

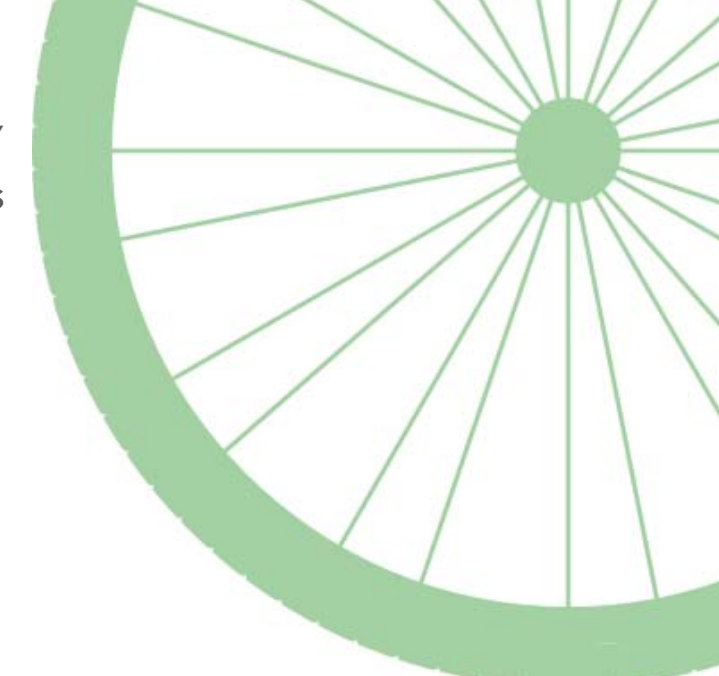
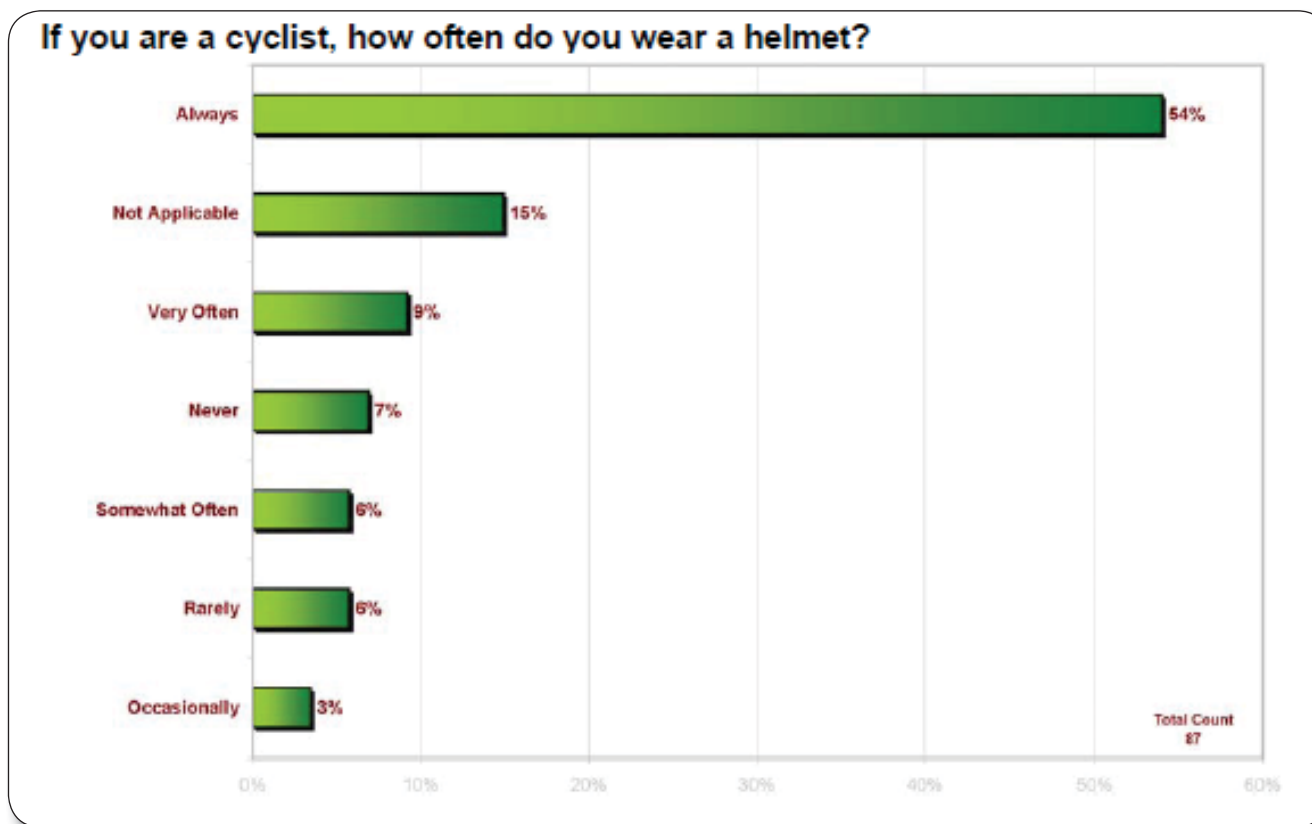
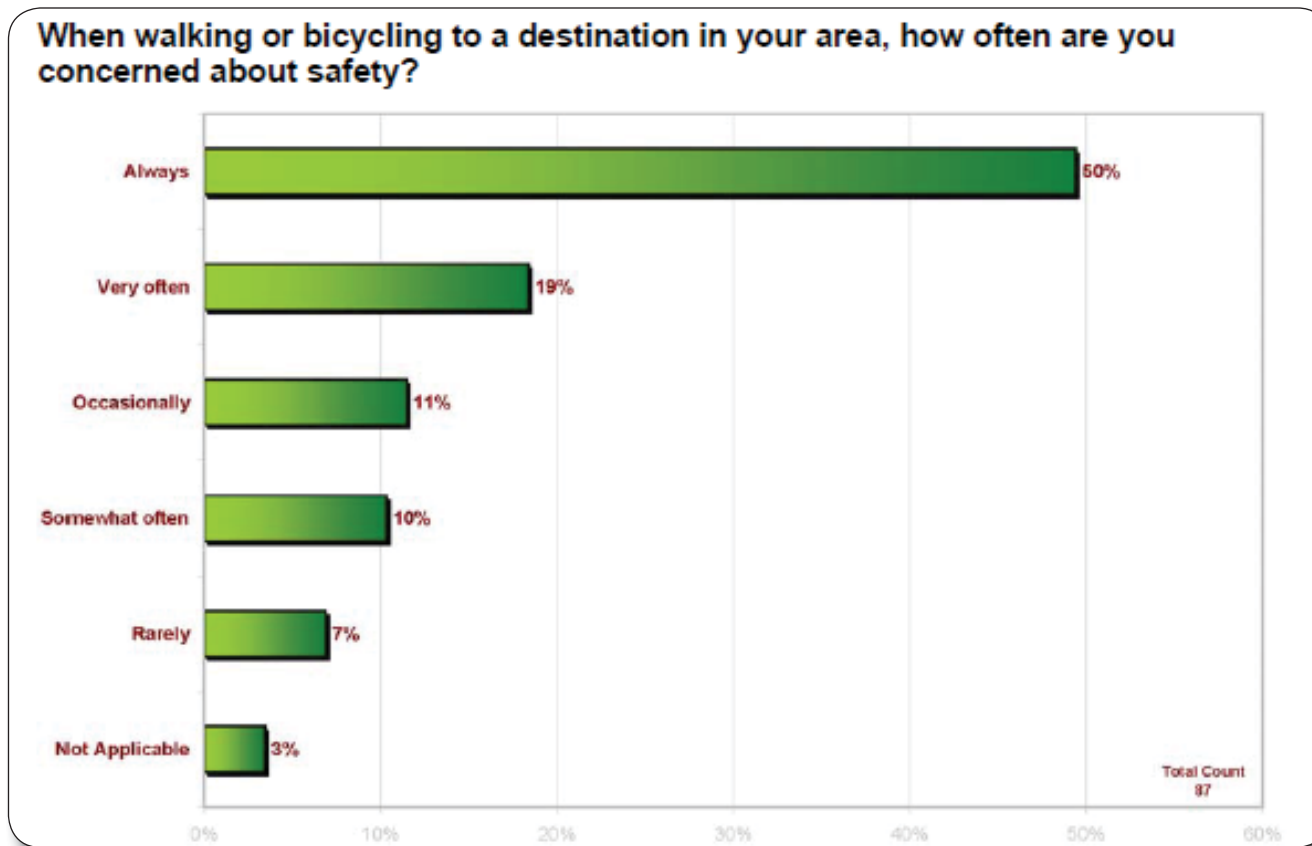


Source: San Antonio-Bexar County Regional Safety Study, 2010



2010 Regional Safety Study - Safety Survey

The behavior of bicyclists can often be a contributing factor to crashes and therefore an major element in safety. The Transportation Safety Survey component of this report identified some of the behaviors of San Antonio's bicyclists. A majority of bicyclists surveyed always wear a helmet, and only 7% never wear one. Also, 24% of the survey respondents said they had been involved in an on-road crash. Half of the bicyclists surveyed said they are always concerned about safety when walking or bicycling to a destination.





WHO BICYCLES IN SAN ANTONIO?

The San Antonio region is home to 1.6 million people, including college students, businessmen and women, young “creative class” professionals, artists, school children, families, senior citizens, non-English speakers, blue-collar service workers, military personnel and veterans, and outdoor enthusiasts, all of whom are road users in some form or fashion and viable candidates for bicycling. This plan seeks to make bicycling attractive to all residents and visitors to San Antonio, of every ability. With an already growing bicycle population and greater awareness of the benefits of bicycling, there are many opportunities to increase bicycle usage throughout San Antonio.

Bicyclist Classification

There is not one “type” of bicyclist in San Antonio. Bicyclists differ based on skill level as well as on the purpose of their trip. A majority of bicyclists in San Antonio ride for recreational purposes or for exercise. Their needs and preferred bicycle facility types can be very different than those who ride for commuting purposes or to run an errand (known as “utilitarian” bicyclists). Within these two primary categories of bicyclists, there are subcategories based on skill level – advanced (A), beginner/novice (B), or child (C).

The behavior and preferred facility of bicyclists can often be generalized based on the purpose of the trip and the skill level of the bicyclist. For example, advanced cyclists are often more comfortable mixing with traffic, and an advanced utilitarian cyclist will look for the most direct path between his/her origin and destination, no matter the obstacles. On the other hand, beginner cyclists are less likely to take the lane with vehicular traffic and prefer to use a dedicated bicycle lane or multi-use path. They are more apt to go out of their way to use a facility like this than are advanced cyclists.

Likewise, there is a difference among recreational cyclists and utilitarian cyclists. Utilitarian cyclists are destination driven – to work, to shop, to a restaurant, etc. Utilitarian cyclists use bicycling as a mode of transportation, either out of necessity or because they choose to. These trips are generally short and are destined for work, a shopping area, school, university, park, or some other destination. Recreational cyclists, on the other hand, seek long rides that have as few interruptions or obstacles as possible. They ride on weekends or during lunch with the intent of getting in a good workout.

Description of A, B, and C Cyclists

Advanced or experienced riders are generally using their bicycles as they would a motor vehicle. They are riding for convenience and speed and want direct access to destinations with a minimum of detour or delay. They are typically comfortable riding with motor vehicle traffic; however, they need sufficient operating space on the traveled way or shoulder to eliminate the need for either themselves or a passing motor vehicle to shift position.

Basic or less confident adult riders may also be using their bicycles for transportation purposes, e.g., to get to the store or to visit friends, but prefer to avoid roads with fast and busy motor vehicle traffic unless there is ample roadway width to allow easy overtaking by faster motor vehicles. Thus, basic riders are comfortable riding on neighborhood streets and shared use paths and prefer designated facilities such as bike lanes or wide shoulder lanes on busier streets.

Children, riding on their own or with their parents, may not travel as fast as their adult counterparts but still require access to key destinations in their community, such as schools, convenience stores and recreational facilities. Residential streets with low motor vehicle speeds, linked with shared use paths and busier streets with well-defined pavement markings between bicycles and motor vehicles, can accommodate children without encouraging them to ride in the travel lane of major arterials.

Source: Federal Highway Administration, as described by AASHTO, 1999, *Guide for the Development of Bicycle Facilities*, p 6

Image source, from top to bottom: Justin Moore, www.outdoorphoto.com; Justin Moore, www.outdoorphoto.com; City of San Antonio



SUMMARY OF THE NEEDS AND APPROPRIATE ACCOMMODATIONS FOR VARYING BICYCLE USER TYPES

Type of Bicyclist	Needs	Accommodations
A — Advanced (5% of all riders)	<ul style="list-style-type: none"> • Direct access to destinations • Ability to ride at a maximum speed with minimal delays • Sufficient operating space 	<ul style="list-style-type: none"> • Enforced speed limits • Wide curb lanes (urban) • Paved shoulders (rural)
B — Basic C — Child (combined 95% of all riders)	<ul style="list-style-type: none"> • Comfortable access to key destinations • Low speeds and low volumes • Well-defined separation on roadway 	<ul style="list-style-type: none"> • Ensure lower speeds • Bike lanes, paths, or routes • Paved Shoulders

Source: FHWA/FTA, 2008, *Peer Exchange on Best Practices in Bicycle Facilities Planning*

John LaPlante, long-time Chicago city traffic engineer and now a Fellow of the Institute of Transportation Engineers, explains that when designing a system, all three experience/comfort levels must be accommodated. “The selection of which facilities to build and where to build them should reflect the existence of all three levels and their varying degrees of comfort and safety using different facility types.” According to LaPlante, only about 5 percent of all bikers are “advanced cyclists”; 95 percent of cyclists overall are “basic” or “child” cyclists.¹

A unique category of bicyclist in San Antonio is the tourist. San Antonio has a multitude of tourist destinations beyond the Riverwalk that attract visitors from across the nation and around the world. They generally fall into the beginner, utilitarian cyclist category. There is a growing tourism sector based on active vacations. These tourists are often highly experienced and skilled on and off-road bicyclists. Regardless of experience level, visitors are less familiar with San Antonio’s streets, and are destination driven – although the destinations tend to be tourist attractions rather than major employers or the local grocery store. San Antonio’s goals for bicycling extends beyond those who live and work in San Antonio and the city strives to become bicycle-friendly for visitors as well.

Keep in mind, classifying bicyclists is a generalization. Some advanced cyclists still prefer off-street facilities over taking the road, while some recreational cyclists may exclusively use urban streets for their ride. In many instances bicycle facilities that are designed for recreational use are used for commuting, and vice versa. Therefore, on- and off-street facilities should be connected to facilitate movement of all bicyclists, and the needs of all users must be considered when building the network. By understanding that there are a variety of cyclists’ needs and behaviors, we can plan for and create a network that serves all bicyclists, for all purposes, and all abilities.

Where San Antonians are Going

Another way to evaluate the bicycle network and identify needed improvements is to identify where people are traveling to and from. Development and refinement of the bicycle network took a “node and corridor” approach to emphasize the importance of connecting origins and destinations. The “nodal” approach to the network

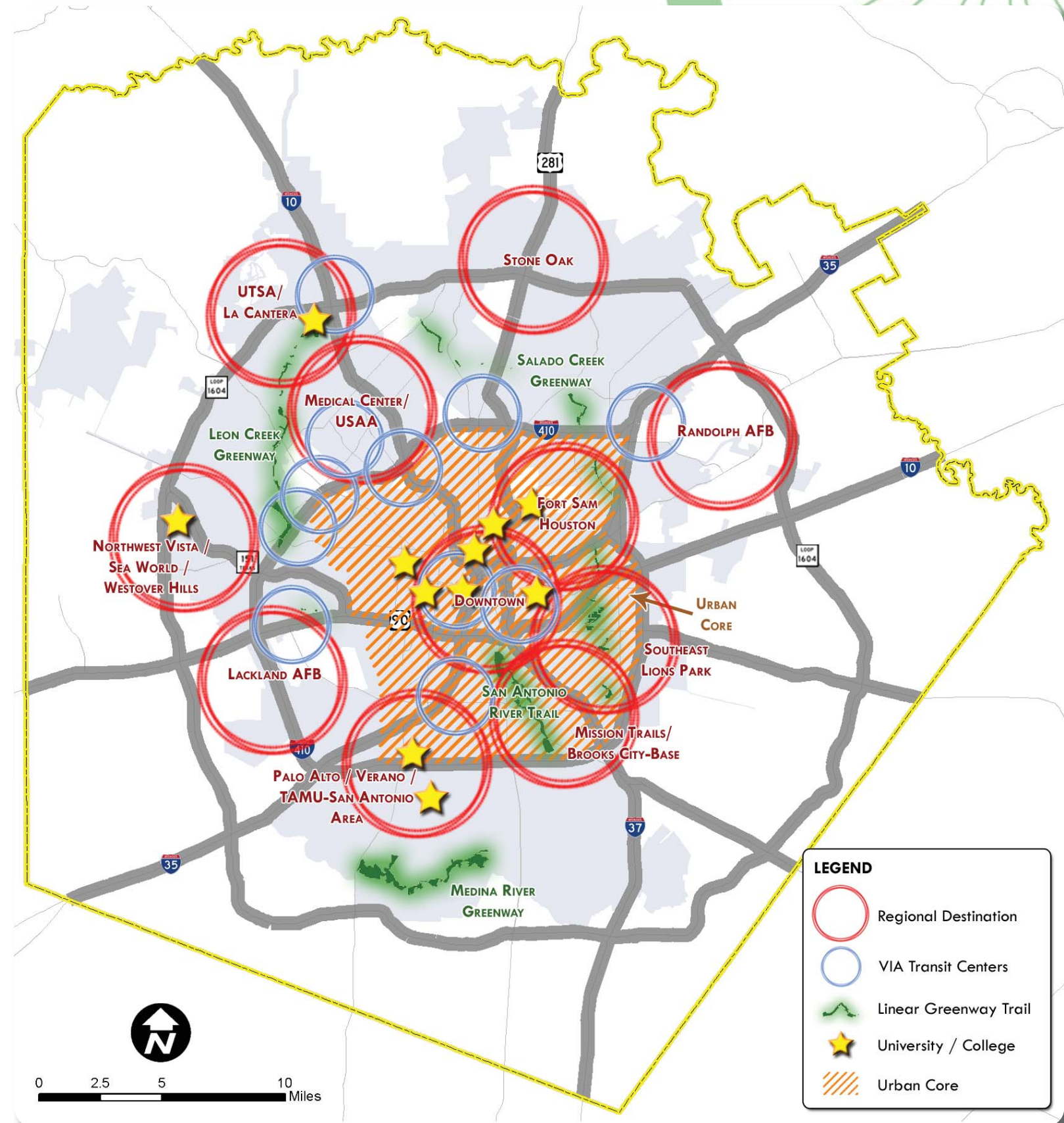
methodology looked specifically at circulation and mobility within an area. The “corridor” component is a regional evaluation in which connections are identified between the planning areas and bicycle districts to emphasize a regional, connected network. This two-pronged approach ensures local mobility as well as regional connectivity. This is based on the assumption that bicyclists want to get to and from the same places as they would by car. Bicyclists aren’t going anywhere different; they’re just getting there in a different way and have different considerations such as slope, traffic volume, speed, etc.

For this process, areas are delineated by taking into consideration the existing planning areas in the region, such as the City’s Sector Plans, neighborhood plans, and reinvestment areas; physical barriers such as freeways and rail corridors; the density of the road network in an area; and destinations. Within these areas, local destinations that served the local or near local area were identified, such as universities and colleges, parks, schools, shopping areas, and local businesses. Land uses and the location of these destinations influence the bicycle network that provides mobility within the planning area as well.

In addition, destination districts were identified around major regional destinations that attract movement, and areas where the density of development and the street network could potentially support bicycling. These are:

- Central San Antonio and the Urban Core (most of the area within Loop 410)
- Medical Center / USAA Area
- UTSA / La Cantera Area
- Westover Hills / Northwest Vista College / Sea World
- Stone Oak / US Hwy 281 / Loop 1604
- Palo Alto / Verano Area / Texas A&M
- Military Bases
- Greenway Trails
- San Antonio River Improvements
- VIA Transit Centers

REGIONAL DESTINATIONS



¹ FHWA/FTA, 2008, Peer Exchange on Best Practices in Bicycle Facilities Planning



WHY SAN ANTONIANS DO & DON'T BICYCLE

17.2% of San Antonians rode a bike in the 30 days prior to the survey

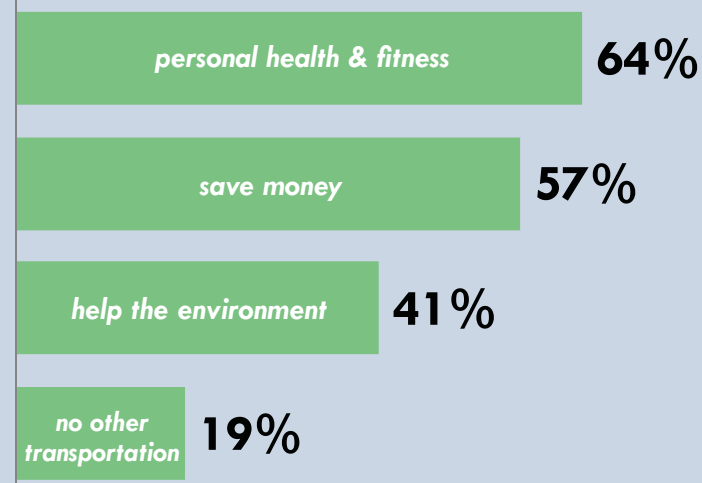
93% of the residents who bicycle do so for recreational purposes

17% bicycle to run errands

7% bicycle for work

4% bicycle to school

What benefit do bicyclists receive?



Biggest hurdles to bicycling today:

- Safety concerns
- Perceived lack of facilities
- Vehicles driving too fast
- Vehicles not sharing the roadway.
- Too busy
- Weather
- Poor health
- Time

Source: San Antonio Regional Bicycle Travel Patterns Survey: Final Report, 2010, San Antonio-Bexar County MPO, ETC Institute

TRENDS AMONG SAN ANTONIO BICYCLISTS

The U.S. Census provides information about the number of bicyclists commuting to work each day. Based upon the 2005-2009 American Community Survey, the San Antonio-Bexar County area has a bicycle mode share of 0.01% of daily commute trips. It is important to note that the Census numbers only represent bicycle commute data, and they do not capture non-work trips.

In addition to the Census data, in 2006, TXDOT funded a travel survey for Bexar, Comal, Guadalupe, Kendall, and Wilson counties. This survey revealed that 0.2% of all trips were made by bicycle. Based on a 2009 population of 1,584,817 for Bexar County, and that the average person makes 3.31 trips per day, a total of 5,245,744 trips are made each day. Based on a trip mode split rate of 0.2%, there are an estimated 104,915 bicycle trips each day in the Bexar County area.

A more recent survey completed by ETC, Institute for the San Antonio-Bexar County MPO evaluated patterns in bicycle travel. The survey asked specific questions about patterns among bicyclists and also about why people choose not to bicycle. Key findings of this report are summarized in the next section.

San Antonio Regional Bicycle Travel Patterns Study (MPO)

(adapted from ETC Institute, 2010, San Antonio Regional Bicycling Travel Patterns Survey: Final Report)

In 2010, the MPO hired ETC Institute to administer a regional bicycling travel patterns survey of San Antonio residents to gather data about and better understand bicycle travel in the region. Some of the specific types of data that were collected include: estimated number of residents who bicycle, the reason residents bicycle, barriers to bicycling, and perceptions of the current condition of bicycling in the region.

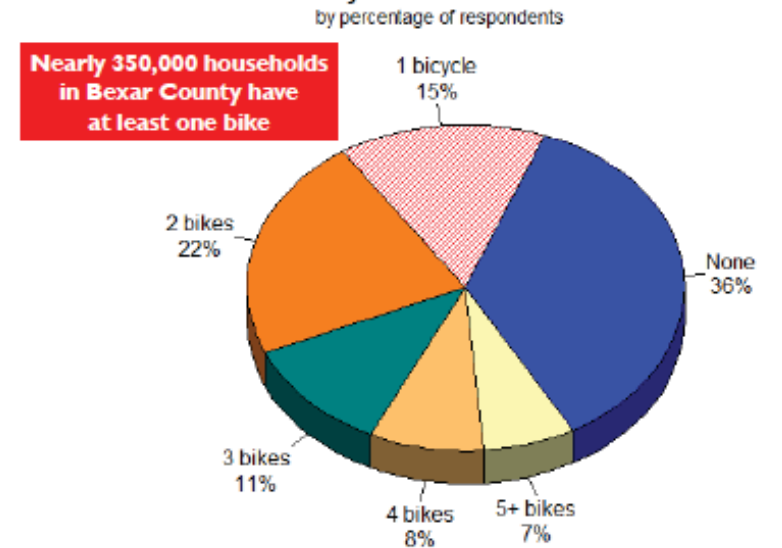
There were three components of the survey: (1) a random survey of residents in the region; (2) a GPS survey, and (3) a survey of "active" bicyclists. The results of the Resident Survey can be used to estimate and project bicycle travel in the San Antonio area. A total of 972 residents of the San Antonio-Bexar County region who were randomly selected completed the study. There were two parallel surveys: a "bicyclist" and a "non-bicyclist"

version, which was administered based on whether the resident indicated they had ridden a bicycle at least once during the past 30 days.

The GPS survey was administered to a subsample of 208 of the bicyclists who completed the "bicyclist" version of the Resident Survey. Each participant in the GPS survey used a GPS device to record his/her bicycle travel for an entire week.

A separate survey of "active bicyclists" was administered to a sample of 324 residents. These participants were selected from one of the following sources: (1) contact lists provided by bike clubs/associations in the San Antonio area or (2) marketing lists for residents who subscribed to bicycling-related publications and residents who had recently purchased bicycling-related equipment.

How Many Working Bicycles Are Owned by Your Household?



Nearly 350,000 households in Bexar County have at least one bike

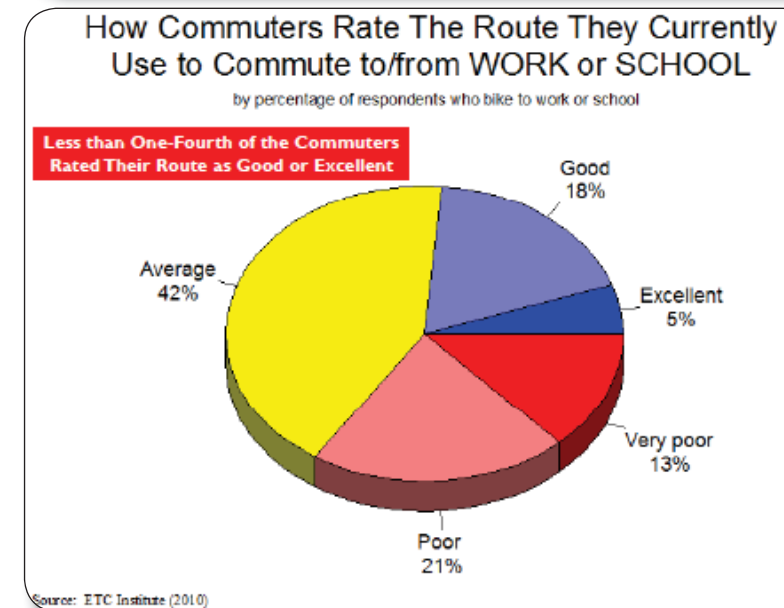
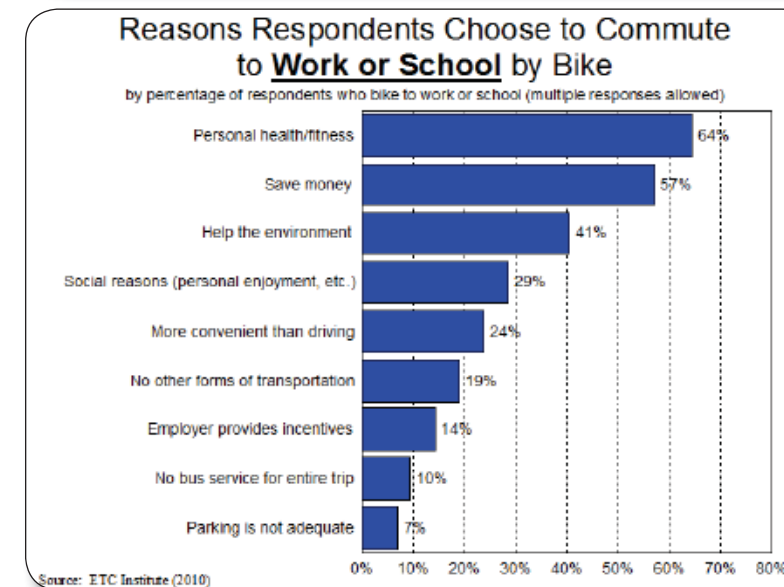
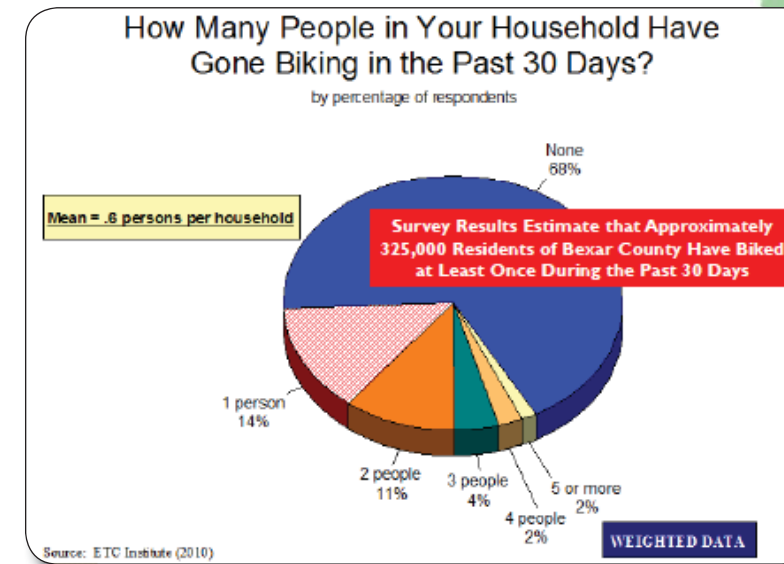
WEIGHTED DATA

Source: ETC Institute (2010)

This study provides valuable information about bicycle use and travel in the San Antonio region. Data is statistically valid and can be applied to develop regional bicycle ridership estimates. Major findings of this study as found in the Final Report of the San Antonio Regional Bicycling Travel Patterns Survey are listed below:¹

- There are approximately 325,000 residents in Bexar County who bicycle at least once a month.
- Age distribution: 48% of the people who ride bicycles in the region are age 20 or younger; 14% are 21-30; 12% are 31-40; 12% are 41-50; 9% are 51-60; and 4% are 61 years or older
- Ninety-three percent (93%) of the adult residents surveyed who had bicycled in the past 30 days indicated that they bicycled for recreational purposes; 17% bicycled to run errands; 7% bicycled to go to work; and 4% bicycled to go to school.
- The majority (68%) of residents who commute to work or school on their bike reported that they regularly encounter problems along their route. Less than one-fourth (23%) of those who commute by bike to work or school rated the route they use as good or excellent.
- Eighty-four percent (84%) of those surveyed who had biked in the past 30 days indicated they preferred to ride on streets with bicycle lanes; 7% preferred to ride on streets without bicycle lanes; and 9% did not have a preference.
- Sixty-nine percent (69%) of those surveyed who had bicycled in the past 30 days indicated that they preferred to ride their bicycle on off-street biking facilities without traffic; 19% preferred to ride on street with traffic; and 12% did not have a preference.
- Seventy-seven percent (77%) of those surveyed who had bicycled in the past 30 days indicated that they would use off-street facilities to get to their destination even if the off-street facility route made their trip 25% longer.

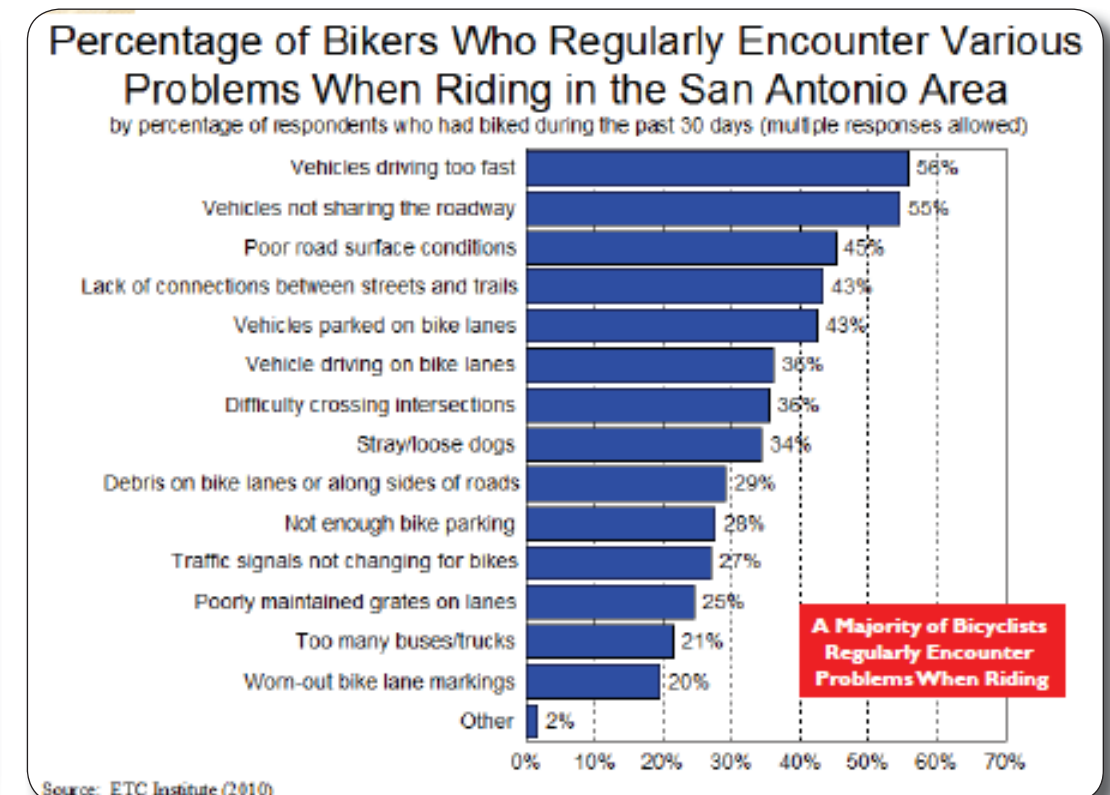
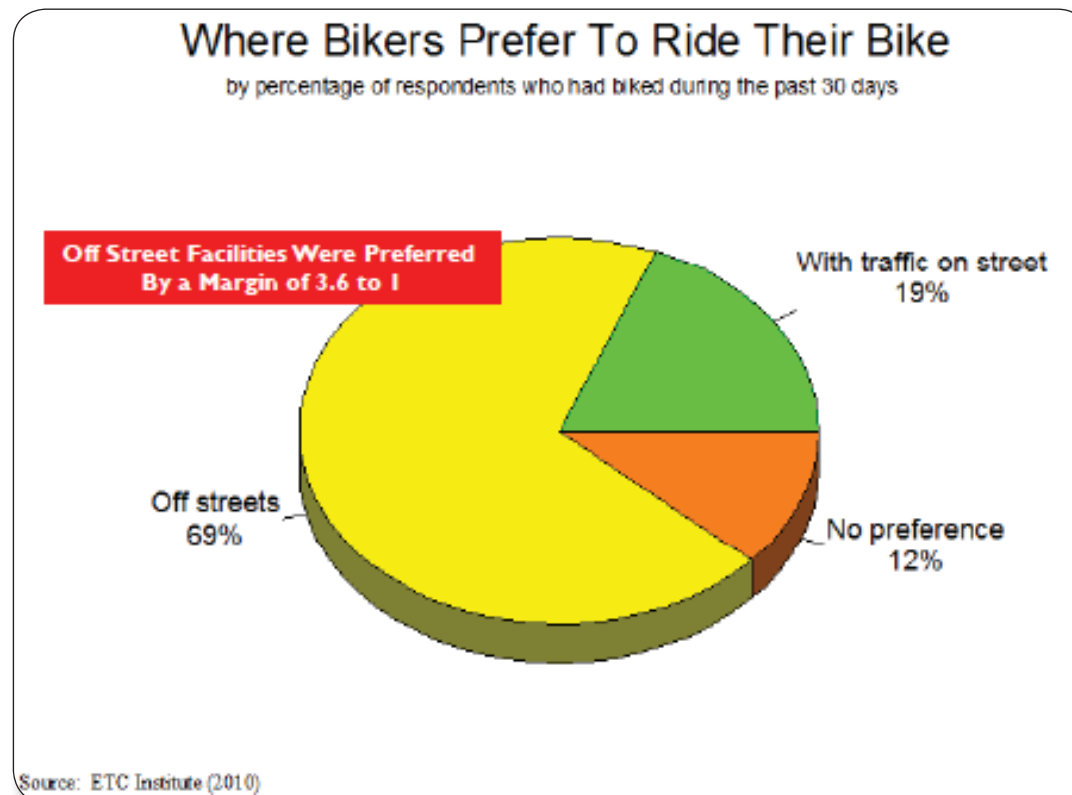
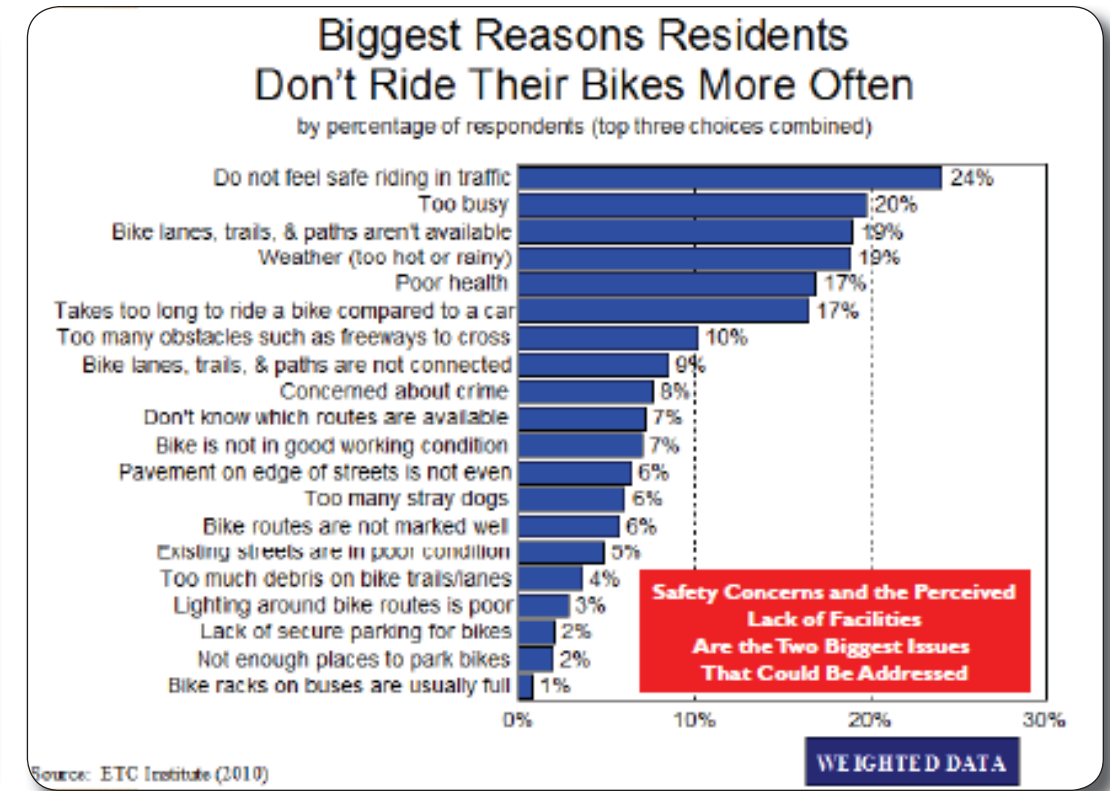
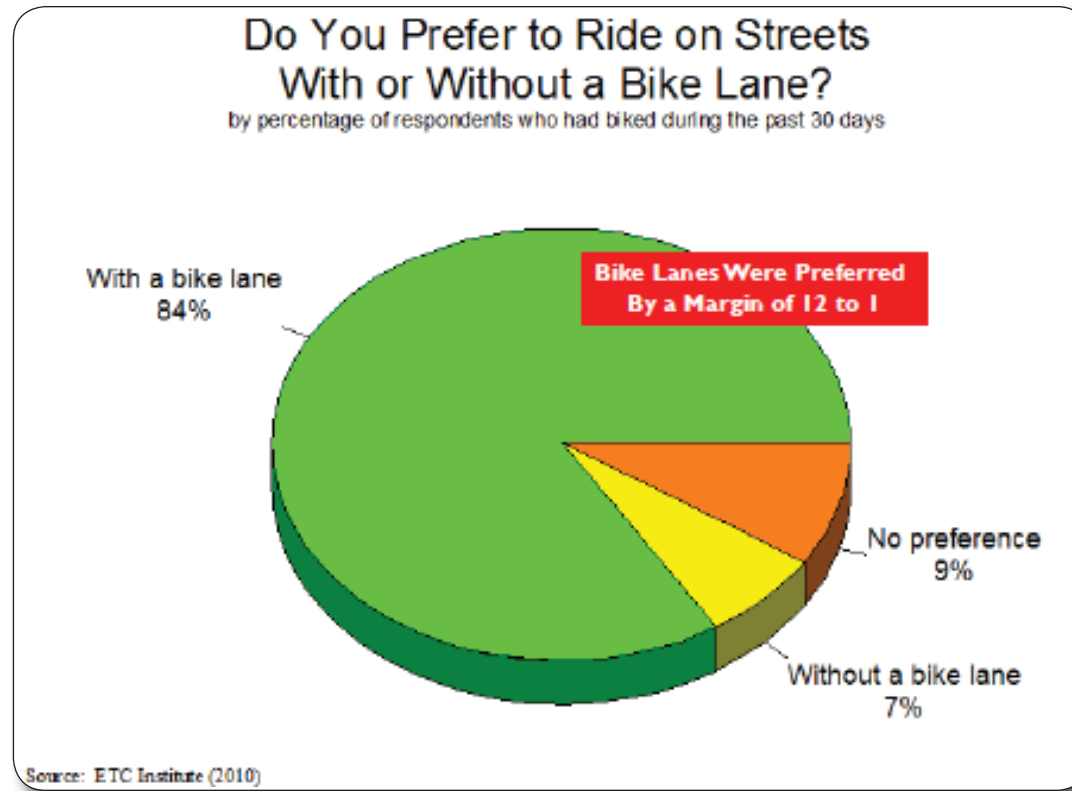
- The top reason that residents said they do not bicycle more often was they do not feel safe when riding their bike. Other frequently reported reasons included: being too busy, the lack of bicycle lanes and paths, inclement weather, and the perception that it takes too long to travel by bicycle compared to travel by car.
- Seventy-two percent (72%) of the residents surveyed thought it was important to make improvements to bicycle facilities in the region. Only 10% thought it was not important. People who did not ride bicycles placed almost as much importance on improvements to bicycle facilities as bicyclists.
- Residents generally thought that safety related improvements were the most important types of improvements to make to bicycle facilities in the San Antonio area. The three most important improvements to residents were: making intersections safer for bicyclists (42%), adding safe ways for bicyclists to cross roads (41%), and adding bicycle lanes to streets (32%).
- Sixty-four percent (64%) of the residents surveyed thought funding for bicycle facilities should be increased over the next five years; 16% thought it should stay the same, and 8% thought it should decrease. Twelve percent (12%) did not have an opinion.

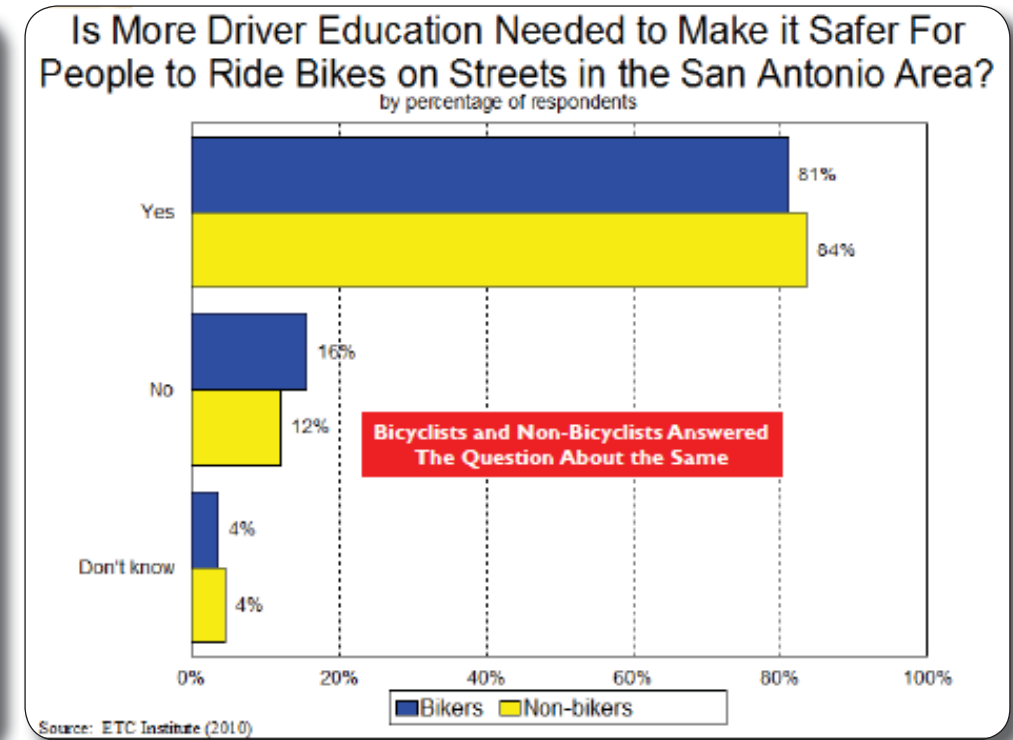
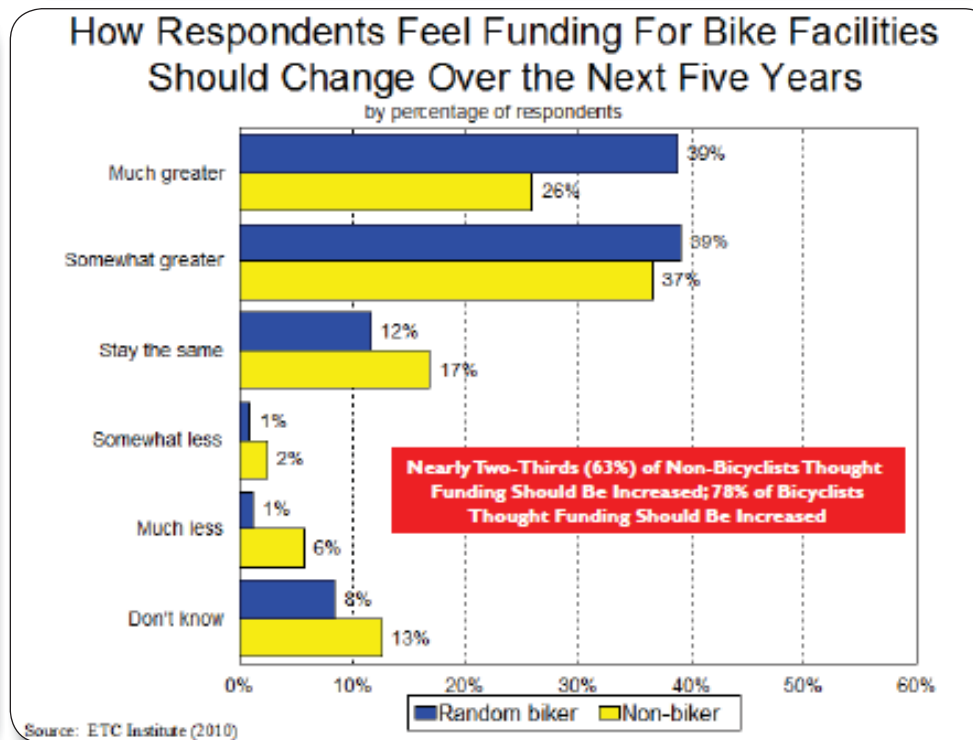
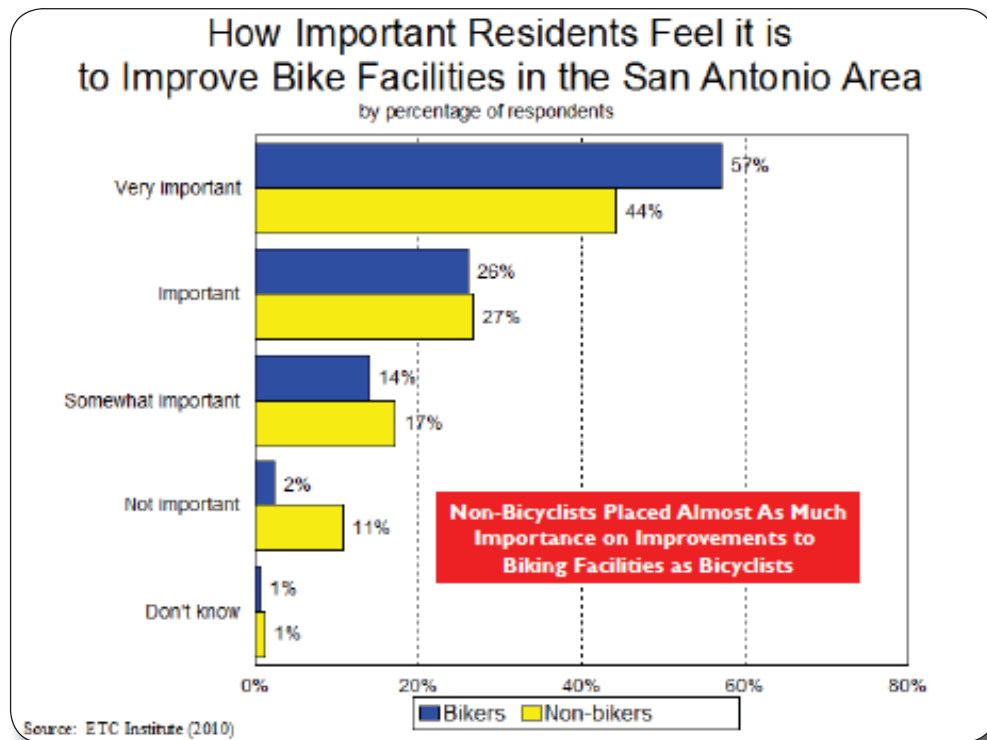
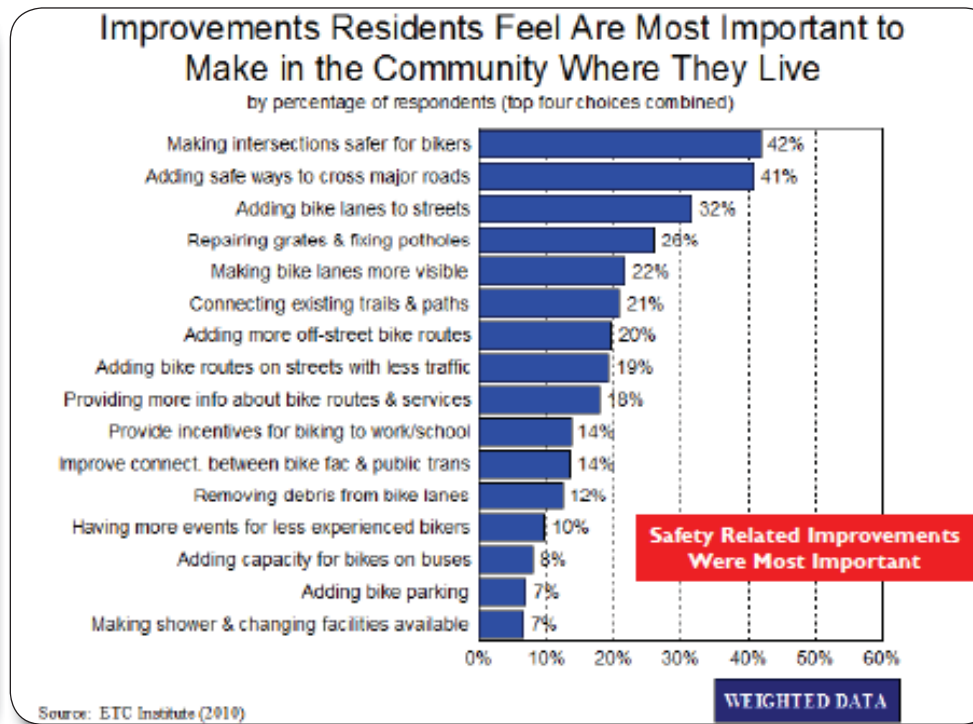
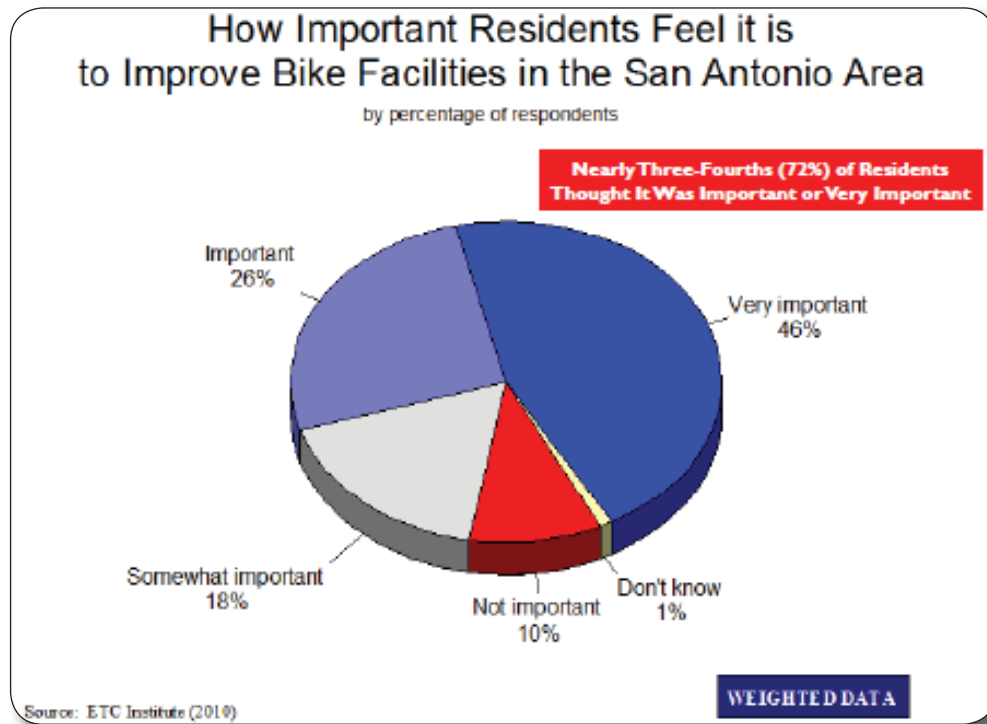


¹ The presentations of this study can be found at <http://www.sametroplan.org/Committees/BMAC/bmac.html>.



The statistics on the previous pages and these pages are from the final report of the San Antonio Regional Bicycle Travel Patterns Survey. They provide information on the characteristics of bicyclists in the San Antonio region, preferences, barriers, the feelings about the importance of improvements to the region's bicycle system. The full report produced by ETC Institute is available from the San Antonio-Bexar County Metropolitan Planning Organization.







BIKE PLAN 2011 PUBLIC INPUT

In addition to the Bicycle Travel Patterns Survey, the Planning Team used other means to gather input from San Antonians about their concerns and vision for the future of bicycling.

Preliminary Intercept Surveys

Early in the planning process, an intercept survey was distributed at various events around San Antonio to gather preliminary information about existing conditions for bicycling. These surveys were distributed at the April 2010 Bike Night meeting; the Walk & Roll Fest in May 2010; a Sierra Club meeting in May 2010; and the BikeMS Expo in October 2010.

The survey asked why and where people bicycle in San Antonio. It also asked people to tell us what the hurdles exist to improving bicycling throughout the region as well as what specific routes need improvement. The information obtained on these surveys helped identify the issues in San Antonio to guide early field work efforts.

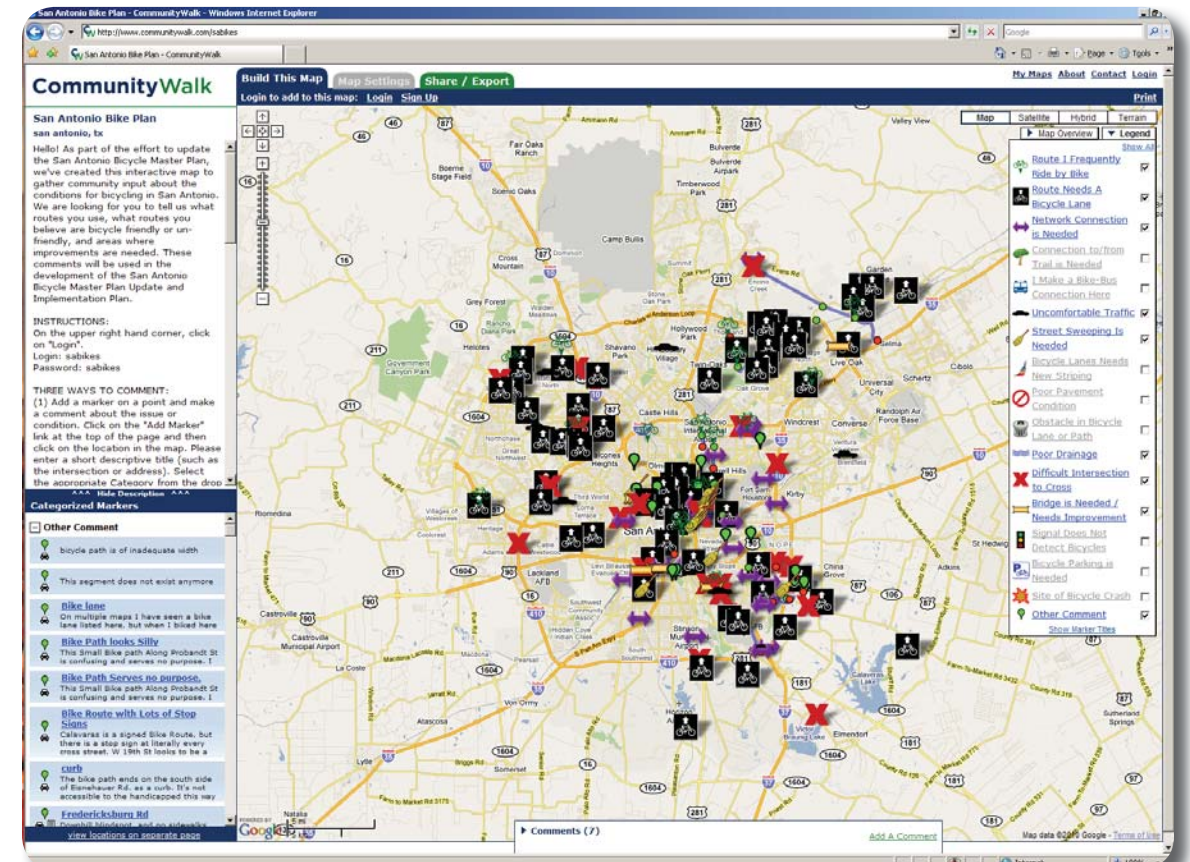


Jim Carrillo of Halff Associates talks to a bicyclist at Walk & Roll Fest in May 2010

Community Walk

The planning team set up a commenting platform on the web using CommunityWalk.com, a map-based website that allows people to make comments to specific points, intersections, and routes on a map of the San Antonio area. Over a six-month period, over 400 comments were recorded on the CommunityWalk.com website. These comments were incorporated into the network recommendations and prioritization.

CommunityWalk Comments	
Comment Category	Number of Comments
Route Needs A Bicycle Lane	112
Connection to/from Trail is Needed	31
Network Connection is Needed	31
Bicycle Lanes Needs New Striping	29
Difficult Intersection to Cross	29
Street Sweeping Is Needed	19
Uncomfortable Traffic	18
Poor Pavement Condition	17
Obstacle in Bicycle Lane or Path	13
Bicycle Parking is Needed	12
Other Comment	9
Bridge is Needed / Needs Improvement	8
Poor Drainage	7
Other Comment; Inadequate Facility	6
Signal Does Not Detect Bicycles	4



Screenshots of CommunityWalk site set up for the San Antonio Bike Plan 2011



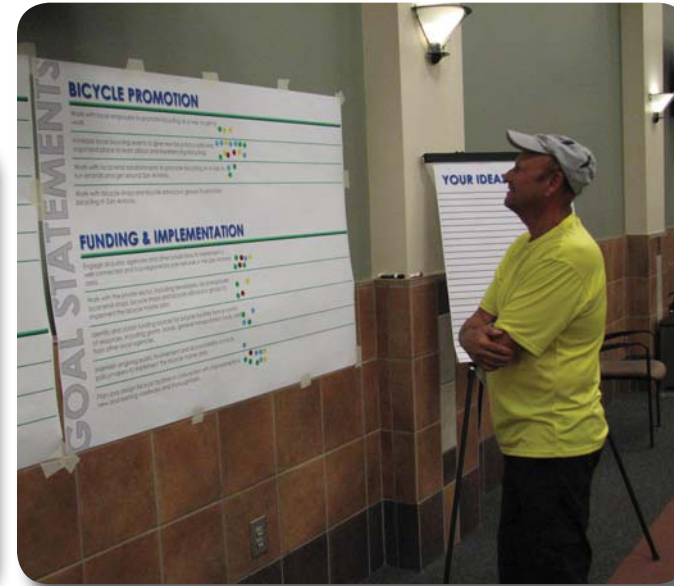


Public Meetings

In October 2010, draft recommendations for the bicycle network were prepared and presented to the public at four public meetings held at various locations throughout the City of San Antonio. A total of 102 people attended these meetings, which were held at the following dates and locations:

- October 11, 2010 at the San Antonio Northeast Service Center located at 10303 Tool Yard in northeast San Antonio
- October 12, 2010 at the Harlandale Community Center located at 7227 Briar Place in south central San Antonio
- October 13, 2010 in conjunction with the regularly scheduled Bicycle Mobility Advisory Committee Bike Night at the VIA Metropolitan Transit Center located at 1021 San Pedro Avenue in central San Antonio
- October 19, 2010 at the Holiday Inn Northwest located at 10135 SH 151 in west San Antonio

Meetings began as an open house, where attendees were able to view boards and maps of the recommended network and provide comments and their input. A questionnaire was also distributed that asked meeting attendees of their priorities for implementation of the network. The most frequently identified corridors include Fredericksburg Road, San Pedro, Broadway, Austin Highway, Babcock Rd, Blanco Rd, and Roosevelt.



From top left image, clockwise: College students attend a public meeting as volunteers and have the opportunity to provide input on the bicycle master plan; a meeting attendees reviews draft goal statements at a public meeting in July; Physical Therapy patients on bicycles fill out surveys about bicycling in San Antonio; Citizens review recommendations at BMAC Bike Night at VIA; a young bicyclist equips her bike with bike lights at a public meeting in October 2010.



POTENTIAL FOR INCREASED BICYCLING

Emerging land planning and development patterns across San Antonio must support bicycle use. Many of San Antonio's neighborhoods – particularly within Loop 410 – were developed with pre-WWII land use patterns where residential uses are mixed with neighborhood retail, employment, and other activities. Many of these neighborhoods have remained intact, are thriving today, and have potential to become even more active as young professionals move back into the city. The bicycle is already a viable and desirable form of transportation in these areas due to the established street grid and short distances between destinations.

Mixed Use Development Can Support Housing,

Employment, and Transportation - As noted earlier in the descriptions of the key bicycle destinations, the growth of San Antonio has largely occurred around evolving employment centers. Some of these areas have the street pattern to support bicycle use, and other areas, while not bicycle-friendly today, have the potential to become bicycle friendly. These multiple employment centers create the core of various nodes throughout the city. By focusing on the employment centers, there is the opportunity to create mixed-use nodes, a development pattern that supports bicycle transportation.

Rising Cost of Fuel - Additionally, across America and around the world, there is rising concern over oil and gas prices. As households become more economically conscious of the cost of owning and driving a vehicle, the bicycle will become a more attractive form of transportation. According to the San Antonio Regional Bicycling Travel Patterns Survey, nearly 50% of non-bicyclists indicated that they would ride their bike if gas prices rise above \$5 per gallon.

A Healthier City - In May 2010, Mayor Castro launched the Fitness Council to promote a healthier, more active community. Since then, the City's Metro Health Department has been busy addressing health and fitness issues and promoting a healthier city. Bicycling directly supports the City's efforts to improve health and fitness across the city. The time is ripe to coordinate with Metro Health to promote bicycling as a component of a healthy lifestyle in San Antonio.

Support for the Greenway Trails system illustrates a support for active living in San Antonio. Continuation of the Greenway Trails program and providing neighborhood access to the system will not only provide a means by which to bicycle, but the visibility of the system will help motivate San Antonians to change one's lifestyle.

VIA Metropolitan Transit's Long Range Plan, SmartWaySA, is the community's transportation vision for the community for the next 25 years. The plan goes beyond simply identifying future transit opportunities and focuses on opportunities to connect supportive land uses by transit and bike. Additionally, SmartWaySA identifies opportunities to expand mass transit options to include bus rapid transit and passenger rail, two systems that will further support bicycling. VIA is a strong ally in improving transportation choices to include sustainable options and the future of mass transit in San Antonio will be a critical component in supporting and expanding bicycle use throughout the region.

Given the growing commitment for a more eco-conscious, health-conscious, and dollar-conscious lifestyle, there is great potential to increase bicycle use for both transportation and recreation needs.