



Image Source: City of San Antonio

implementation strategy



**IMPLEMENTATION STRATEGY**  
funding  
staffing  
partnerships

*“An investment in bicycling is an important part of an overall effort to reduce congestion, air pollution, meet climate action goals, ensure that you have a healthy community.”*

*~Mayor Sam Adams, Portland, OR*

**IMPLEMENTATION STRATEGY**

Earlier chapters explained recommendations and actions for expanding the bicycle network and providing support programs for bicycling. Of course, a strategy for implementation goes beyond construction of infrastructure and execution of programs. An implementation strategy identifies methods for strengthening execution of the recommendations.

Funding and staffing are the key elements of implementation. This includes not only identifying dedicated funding and staff; it also includes ongoing cooperation within and among City departments, other public agencies, and bicycle stakeholders to leverage resources that will strengthen implementation efforts. Furthermore, monitoring progress of implementation will help San Antonio periodically assess its goals, identify new opportunities, and re-evaluate priorities and resources allocation.

Over the past several years, San Antonio has been successful at coordinating efforts and securing some funding to see an increase in the miles of bicycle facilities and programs that support bicycling. Relationships among the City of San Antonio departments and the various agencies involved has proven to be strong. Additionally, the Bicycle Mobility Advisory Committee has played an integral role in bringing bicycle advocates together and giving bicyclists a voice in the San Antonio region. As the voice of bicyclists grows, the City and various agencies have responded to their needs.

Still, if San Antonio wants to become more bicycle friendly than bronze-level, the City and regional agencies and partners for bicycling need to step up their game. There is room to grow and further increase facilities and services toward bicyclists in order to become one of the most bikable cities in America.

**IMPLEMENTATION STRATEGY  
GOAL & OBJECTIVES**

**Dedicate funding, political commitment, and partnerships to implement the facilities and programs in this plan.**

Objectives:

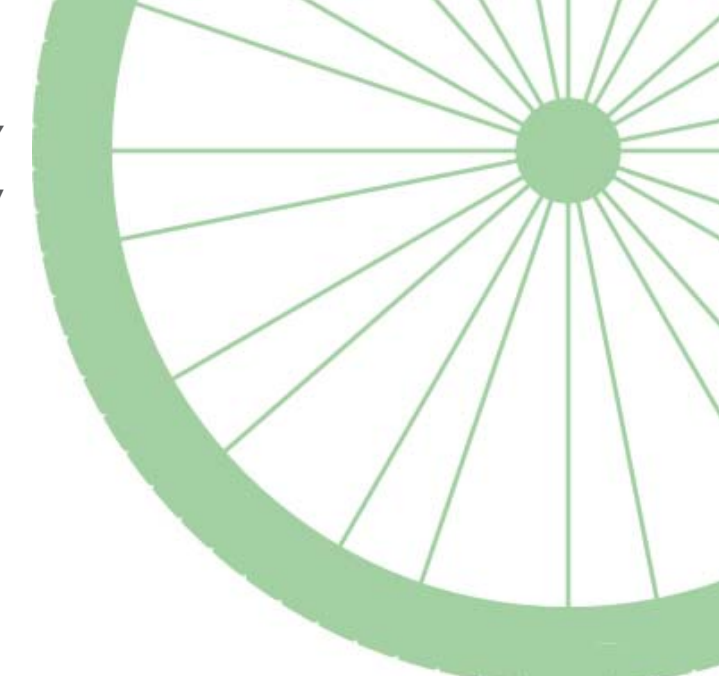
- I. Increase staffing and funding in appropriate areas of the City to implement the goals and objectives of Bike Plan 2011.
- II. To institutionalize bicycle planning through new or revised policies, code amendments, operating procedures, and citizen advisory committees.
- III. Engage and coordinate with other departments, agencies, and organizations to leverage resources and strengthen implementation efforts.
- IV. Periodically monitor implementation progress and update the bicycle master plan on a regular basis.

Implementation of Bike Plan 2011 is contingent on coordination and cooperation among four key entities:

- 1. Political commitment** – Elected and appointed policymakers need to commit to policies that support the goals and objectives of this plan, or risk hindering implementation. As council members change, new council members should become acquainted with the goals, objectives, and recommendations of Bike Plan 2011.
- 2. Sustained funding** – There are a variety of funding opportunities to implement different components of this plan, including the general fund, bonds, and grants.
- 3. Agency buy-in** – Implementation requires the commitment of several City departments, agencies, and municipalities in order to create a truly comprehensive and regional bicycle network and strong environment for bicycling.
- 4. Partnerships among the bicycling community** – Bicycle advocates push their political representatives and are the voice of their constituents. Support from and alliance with the bicycling community will augment program goals, but a consistent and sustained message is needed from users to their policy makers.

RECOMMENDED STAFFING LEVEL <i>(as funding is available)</i>		
Program Requirement		Projected Budget
Staffing Needs	4 FTE	\$250,000
Annual Capital Construction (excluding major bond funded projects)		\$150,000
Replacement/Maintenance		\$100,000
Education and Encouragement		\$50,000
General Program Costs (Office, Miscellaneous Needs)		\$50,000
<b>Projected Annual Total</b>		<b>\$600,000</b>





## I. STAFFING & FUNDING

Implementation of both the bicycle network and bicycle programs will require funding and staffing increases. Historically, the Bicycle Program only received \$50,000 annually from the Advanced Transportation District fund. As such, bicycle facilities have been installed slowly and have created a disjointed network. Additionally, budgets did not include maintenance of these bicycle facilities, leading to decay of the existing bicycle network. In 2010, the Bicycle Program received a boost when the City Manager directed the Public Works Department to install bicycle facilities as part of their 2011 street maintenance program with \$150,000. A regular source of funding is needed to not only build the bicycle network, but also provide the required regular maintenance.

**Recommendation** - Staffing of a comprehensive bicycle program in San Antonio should include, at a minimum, four FTEs including a comprehensive program coordinator, an engineer dedicated to designing bicycle facilities, and two full-time staff members responsible for education and encouragement programs, GIS mapping, web updates, and related duties. However, the size of the City of San Antonio would warrant a larger staff to implement the goals and recommendations of Bike Plan 2011.

In the past, partnerships with other departments, agencies, and bicycle advocates have helped provide the funds for the current bicycle programs, such as Walk and Roll Fest and Walkable Community Program provided by the SA-BC MPO, organized rides across the region and safety and bike maintenance classes offered by bicycle organizations and advocate groups, the Commuter Challenge hosted by AACOG, and capitalizing on the opportunity for bicycle tourism through the B-Cycle Bike Share program and partnering with the Convention and Visitors Bureau to create a Downtown Bike Map.

### Funding Sources

Funding for bicycle facilities and programs come from a variety of sources, including local resources such as tax revenue and voter-approved bonds as well as federal funds and grants related to transportation and even non-transportation programs. Current best practices in cities which experience a high bicycle modal split for the commute

to work spend approximately 1% to 5% of their annual city budget on bicycle plan implementation, and set minimum funding amounts per year for plan implementation. Below is a description of available funding sources for bicycle planning and plan implementation.

### Local Funding

The General Fund typically funds general city services such as public safety, parks and recreation, and regular transportation maintenance, including bicycle facilities. A component of the General Fund is Advanced Transportation District funds for street maintenance, of which \$50,000 is allocated to construction of bicycle facilities, and as mentioned previously, an additional \$100,000 was added in 2010 for bicycle facilities as part of the 2011 Street Maintenance Program under the Public Works Department. Coordinating bicycle facility improvements in conjunction with standard roadway improvements is the most efficient way of installing bicycle facilities using the General Fund.

San Antonio does much of its major transportation construction through bonds, a voter-approved general obligation debt to be used for a particular capital improvement project. In 2007, voters approved \$550 million for transportation, drainage, public facility, and recreation projects to be completed over 5 years. Through this bond, 17 miles of bicycle lanes and paths were or are being constructed. These projects are overseen by the Capital Improvement Management Services department. At the time of this planning process, the City had begun forming bond projects for the next bond election, occurring in 2012. A number of bicycle infrastructure projects proposed in Bike Plan 2011 will likely be funded through the 2012 Bond, if approved.

Greenway Trails Sales Tax was approved in 2000, 2005, and 2010 to fund planning, design, land acquisition, and construction of the Greenway Trails system. With approval to continue the sales tax in 2010, the trail system will continue to be constructed. On-street connections to the Greenway Trails is a priority of Bike Plan 2011.

### Federal and State Funds

There are several grants and funding opportunities from federal and state transportation and non-transportation programs.

Section 217 of Title 23 of the U.S. Code calls for the integration of bicycling and walking into the transportation mainstream. A series of transportation legislation passed by U.S. Congress has recognized the increasingly important role of bicycling and walking in creating a balanced, intermodal transportation system, and has provided funding sources to create more walkable and bike-friendly communities. The most current legislation is the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users,

### Available Bicycle Funding from Federal-aid Highway Programs

- **National Highway System** funds may be used to construct bicycle transportation facilities and pedestrian walkway on land adjacent to any highway on the National Highway System
- **Surface Transportation Program** funds may be used for either the construction of bicycle transportation facilities and pedestrian walkways, or non-construction projects such as maps, brochures, and public service announcements related to safe bicycle use and walking.
  - Ten percent of each State's annual Surface Transportation Program funds is set aside for Transportation Enhancement Activities, which include facilities for pedestrians and bicycles, safety and educational activities for pedestrians and bicyclists, and the preservation of abandoned railway corridors.
  - Ten percent of each State's annual Surface Transportation Program funds is set aside for the Hazard Elimination and Railway-Highway Crossing Programs, which addresses bicycle and pedestrian safety at hazardous locations.
- Funds from the **Congestion Mitigation and Air Quality Improvement Program** may be used to construct bicycle facilities, pedestrian walkways, or non-construction projects such as maps, brochures, and public service announcements related to safe bicycle use.
- Funds from the **Recreational Trails Program** may be used for all kinds of trail projects. Of the funds apportioned to States, 30% must be used for motorized trail uses, 30% for non-motorized trail uses, and 40% for combination trail uses.
- **National Scenic Byways Program** funds may be used for construction of a bicycle and pedestrian facility along scenic byways.
- **Job Access and Reverse Commute Grants** are available to support bicycle-related services and other projects that are designed to transport welfare recipients and eligible low-income individual to and from employment.
- **High Priority Projects and Designated Transportation Enhancement Activities** include numerous bicycle, pedestrian, trail, and traffic calming projects in communities.
- **Urbanized Area Formula Grants, Capital Investment Grants and Loans, and Formula Program for Other than Urbanized Area** transit funds may be used for improving bicycle and pedestrian access to transit facilities and vehicles.
- The **Transit Enhancement Activity Program** sets aside 1% of Urbanized Area Formula Grant funds specifically for pedestrian access and walkway and bicycle access, including bicycle storage facilities and installing equipment for transporting bicycles on mass transportation vehicles.

Source: Federal Highway Administration, Bicycle and Pedestrian Provisions of the Federal-aid Program, <http://www.fhwa.dot.gov/environment/bikeped/bp-broch.htm>



or “SAFETEA-LU”. The act, which was signed into law in August 2005, authorized \$244.1 billion in Federal gas-tax revenue and other federal funds for all modes of surface transportation – highways, bus, rail, bicycling, and walking. None of the funds are dedicated solely for bicycle or pedestrian facilities or programs, but these programs are eligible for the funds.

According to the FHWA, bicycle projects are broadly eligible for funding from almost all the major Federal-aid highway, transit, safety and other programs. Bicycle projects must be “principally for transportation, rather than recreation, purposes” and must be designed and located pursuant to the transportation plans required of the State of Texas and San Antonio-Bexar County MPO. Generally, the local government or State must share the cost with the Federal aid, and must match 20% of the cost while the Federal aid covers 80% of the cost.

In 2010, the City of San Antonio was awarded \$276,000 through the TXDOT Transportation Enhancement Program for the continuation of its safety and awareness media campaign. A 20% local match in the amount of \$69,000 was committed over three years from Advanced Transportation District funding.

#### **FUNDING AND STAFFING RECOMMENDATIONS:**

**Recommendation 1: Pursue and acquire maximum available funding from state, federal, and other available sources.**

Establish a grant matching reserve fund to be available to rapidly respond to federal and state transportation grants.

**Recommendation 2: Increase funding from the Advanced Transportation District Fund for the installment of new bicycle facilities.**

Currently, \$50,000 is dedicated for new bicycle facilities, including striping new bicycle lanes, painting new pavement markings, or installing new signs for bicycle facilities. Increase this amount to \$100,000 annually. Moreover, dedicate an additional \$150,000 annually to maintenance of bicycle facilities.

**Recommendation 3: Incorporate bicycle facilities construction and maintenance as an integral part of all roadway projects, rather than requiring separate funding sources.**

Obtain consistent and ongoing funding for these elements. This will require an increase in the City of San Antonio’s general budget for funding to implement Bike Plan 2011.

**Recommendation 4: Identify and pursue funding partnerships and support from other local agencies and City departments.**

Leveraging funds with those of other agencies and departments will strengthen implementation efforts. As appropriate, pursue public-private partnerships with private organizations to also leverage funds.

**Recommendation 5: Increase Bicycle Program staff in appropriate departments in the City.**

Within Public Works, fund and hire staff members as needed to assist with planning, design, and construction of bicycle facilities. Over time as implementation ramps up, increase staffing of the “San Antonio Bikes” program within the Office of Environmental Policy and Public Works Department to carry out implementation goals of the Bike Plan 2011, including program management and facility design and construction.



## II. INSTITUTIONALIZING BICYCLES

In March 2010, the U.S. Department of Transportation issued a policy statement supporting the development of fully integrated active transportation networks, recognizing that “the establishment of well-connected walking and bicycling networks is an important component for livable communities” and that “their design should be a part of Federal-aid project developments.”<sup>1</sup> Integrating bicycle considerations into policies and processes is referred to as “institutionalization.” Institutionalization of bicycling means bringing bicycle needs into the City’s mission and corporate culture. It requires internal work by staff and coordination among departments to make changes to policies, plans, and processes that guide the City and its decision makers. Institutionalization also requires external relationships and partnerships with other agencies and organizations. Institutionalization includes establishing and submitting to citizen oversight. ISTEA helped bring about institutionalization of bicycling by requiring state transportation departments to have bicycle and pedestrian coordinators, which provide bicyclists with an important entrée into state transportation bureaucracies. Just as bicycle institutionalization is important at the state level, it is even more important at the local and regional level.

Mobility 2035, the SA-BC MPO Metropolitan Transportation Plan establishes a goal of institutionalizing bicycling by maintaining a full-time bicycle coordinator at local government and transportation agencies; including bicycling facilities in the project design and review processes as well as during the review of subdivision and development plans; coordinating bicycle planning with other communities and agencies; conducting periodic surveys of bicyclists in the region to determine bicycle travel patterns and other information useful in developing the local bicycle network; and assisting local agencies and community groups in developing neighborhood and corridor plans for safe bicycling. The MPO has institutionalized bicycling and pedestrian needs into its mission, making it one of the strongest advocates for bicycling in the San Antonio Region.

However, the MPO doesn’t install bicycle facilities. That responsibilities lies on the area municipalities and other implementing jurisdictions such as Bexar County and TXDOT.

The City of San Antonio and other municipalities and agencies need to institutionalize bicycling into their plans, policies, and operations to create a uniform and cohesive mission that supports bicycling.

### RECOMMENDATIONS TO INSTITUTIONALIZE BICYCLING

**Recommendation 1: Increase citizen oversight with regards to bicycling needs and implementing the bicycle master plan.** Consider requesting that the SA-BC MPO add the chair of the Bicycle Mobility Advisory Committee as a voting member of the MPO Transportation Policy Board.<sup>2</sup> The TPB makes policy for the MPO and prioritizes project selection in the region, and the BMAC serves as an advisory board to the TPB. Including the BMAC chair on the TPB as a voting member would ensure bicycle facilities are taken into consideration with other transportation decisions.

In addition, representation of bicyclist interests on various citizen advisory boards with the City of San Antonio will increase awareness and inclusion of bicycling issues as they relate to other issues across the city. Call upon bicycle advocates to serve on the City’s citizen advisory boards that have decisions that may affect bicycling.

**Recommendation 2: Modify planning and design documents and regulations to reflect the goals and recommendations of Bike Plan 2011.** Amend the UDC to strengthen bicycle facility requirements for new developments. Enhance bicycle parking provisions to include location requirements for bicycle parking. Establish design standards for bicycle facilities. Development standards should ensure bicycle access and safety during construction. Establish street design manuals and guidelines for designing streets and trails to include specifications for bicycle facilities. At a minimum specifications and design for bicycle facilities should follow the latest AASHTO guides. Traffic control specifications should also be included, such as signal timing or detection, channelization, and signage.

**Recommendation 3: Adopt a citywide resolution or policy statement requiring the design of bicycle**

*The intent of institutionalization is to change bicycling and walking from being perceived as alternative activities to being treated as mainstream activities.*

~www.bicyclinginfo.org

**facilities as part of new or reconstructed roadways, and require exception statements for projects that exclude bicycle facilities.** Include experts in bicycle transportation planning on all planning and design teams for major public works projects that affect the transportation system.

**Recommendation 4: Work closely with the planning functions of the City of San Antonio on planning documents such as Sector Plans, Reinvestment Area Plans, the Comprehensive Plan, Complete Streets Policy, and Neighborhood Plans to include a bicycle component.** Use Bike Plan 2011 to guide these planning efforts, or, as deemed necessary and appropriate, make amendments to Bike Plan 2011 to reflect the goals and priorities of local neighborhood plans.

**Recommendation 5: Include review by Bicycle Program of master development plans to ensure connections to the bicycle network.** Work with the planning functions of the City of San Antonio to establish development regulations that require initial phases of major roadway construction (having collector or arterial characteristics) to have an interim bicycle facility that accommodates B/C bicyclists.

**Recommendation 6: Incorporate maintenance of bicycle facilities as component of regular street maintenance programs, such as resurfacing, restriping, and street sweeping.**

### U.S. DOT Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations

The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide – including health, safety, environmental, transportation, and quality of life – transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes.

Source: U.S. DOT, Federal Highway Administration, [http://www.fhwa.dot.gov/environment/bikeped/policy\\_accom.htm](http://www.fhwa.dot.gov/environment/bikeped/policy_accom.htm)

<sup>1</sup> U.S. DOT, Federal Highway Administration, [http://www.fhwa.dot.gov/environment/bikeped/policy\\_accom.htm](http://www.fhwa.dot.gov/environment/bikeped/policy_accom.htm)

<sup>2</sup> Currently, the Chair of the BMAC does not sit on the Transportation Policy Board.



**Recommendation 7: Educate appropriate City staff related to bicycle planning and facility design on current bicycle facility design best practices.**

This includes educating staff of the Office of Environmental Policy, Public Works Department, Capital Improvement Management Services (CIMS), and Parks and Recreation Department. Also, the City, with other agencies, should publish a design manual for bicycle facilities to be used across the region.

### III. PARTNERSHIPS WITH OTHER DEPARTMENTS, AGENCIES, AND ORGANIZATIONS

Interdepartmental and interagency collaborations are a critical component of developing a regional network of bicycle facilities, institutionalizing bicycle considerations in decisions throughout the region, and achieving the goals and objectives of Bike Plan 2011 by integrating bicycle considerations at all levels of decision making throughout the region. Moreover, many federal-aid funding opportunities require cooperation among local and regional entities in developing and implementing goals. By partnering with other agencies and organizations, funding resources can be utilized more efficiently. With several “pocket-cities,” municipalities must work together to implement a connected bicycle network that does not become victim to political boundaries.

Furthermore, public agencies generally have their hands tied when it comes to advocating bicycling, which is why the involvement of advocacy groups is important. These groups can help raise awareness of bicycle issues and impact attitudes toward bicycling. Advocacy groups are able to notify their political representatives of goals for bicycling, as well as serve on boards and committees to help advance bicycling goals throughout the region.

Many recommendations of Bike Plan 2011 require partnerships and collaboration with other City departments, municipalities, agencies, and organizations across the region.

#### RECOMMENDATIONS FOR REGIONAL PARTNERSHIPS:

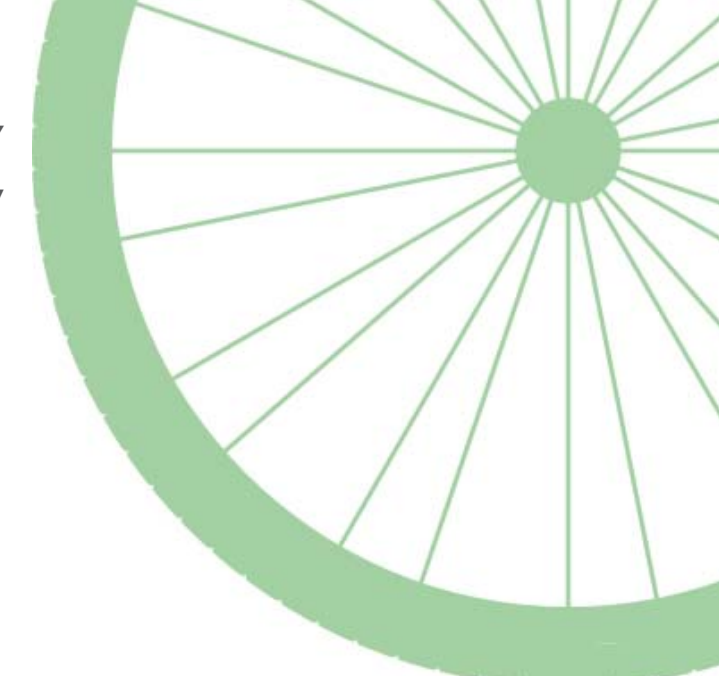
**Recommendation 1: Coordinate with other City of San Antonio departments, agencies, and organizations where necessary to implement Bike Plan 2011.**

Identify and pursue funding partnerships and support from other departments, agencies, and organizations. The table to the right depicts potential partnership opportunities with departments, agencies, and organizations.

**Recommendation 2: Maintain a seat on the SA-BC MPO Bicycle Mobility Advisory Committee that represents the City of San Antonio Office of Environmental Policy, Public Works, Parks and Recreation, San Antonio Police, and Planning and Community Development Departments.**

The BMAC brings together representatives from various agencies and organizations from across the region into a dialogue about bicycling in the San Antonio region. Having representatives from these City departments will maintain an open line of communication these other agencies and organizations.





Potential Partnership Opportunities to Implement Bike Plan 2011	
Department, Agency, or Organization	Partnership Opportunity
CoSA Parks and Recreation Department	On-street to off-street connections; Wayfinding; Education and encouragement
CoSA Public Works Department	Integrate bicycle infrastructure with regular street maintenance schedule; Integrate bicycle facility design standards into manuals and standards developed by the City; On-street to off-street connections; Wayfinding
CoSA Capital Improvements Management Services	Future bond initiatives; On-street to off-street connections; Wayfinding
CoSA MetroHealth	Education and encouragement opportunities to promote bicycling for improved health and fitness
CoSA San Antonio Convention and Visitors Bureau	Promoting bicycle tourism; Marketing
CoSA Downtown Operations	Implementing bicycle facilities and programs in Downtown San Antonio
CoSA Center City Development	Implementing bicycle facilities and programs in Central City San Antonio
CoSA Planning and Community Development	Integrate bicycle component in planning documents; Integrate review for bicycle facilities into development review; Integrate bicycle facility design standards into development code
CoSA Police Department	Education programs Enforcement programs
San Antonio-Bexar County MPO	Education and encouragement programs; Federal funding opportunities; Assistance with coordinating with other municipalities; Identifying regional transportation goals and recommendations (through regional transportation plan); Continue to support the BMAC
VIA Transit	Integrating bicycling and mass transit; Rails-with-Trails or Rails-to-Trails opportunities; Long and Short term bicycle parking
TXDOT San Antonio District Office	Implementing bicycle facilities on TXDOT roadways and bridges; Safe Routes to School Program; On-street to off-street connections; Wayfinding
Bexar County	Implementing bicycle facilities on Bexar County roads and bridges; Opportunities to develop trails through Flood Control Program
San Antonio River Authority	Developing trails along river and creek corridors; Connections from on-street bicycle network to off-street trail network; Wayfinding between on- and off-street networks; Marketing
San Antonio area school districts	Safe Routes to School Program; Education and encouragement programs targeting school-aged population
San Antonio area colleges and universities	Education and encouragement programs targeting college and university students; Implementing bicycle facilities with direct access to and on campuses
Alamo Area Council of Governments	Education and encouragement programs; Regional coordination among agencies
San Antonio area municipalities	Implementing bicycle facilities in other jurisdictions that coordinate with Bike Plan 2011 Bicycle Network
Bicycle Shops	Education and encouragement programs; Bicycle tourism
Texas Bicycle Coalition	Policy guidance for bicycling
Bicycle advocacy groups	Education and encouragement programs
Military Institutions	Encouragement programs targeting military personnel; Implementing bicycle facilities with direct access to and on military grounds



### IMPLEMENTATION RESPONSIBILITY

The City of San Antonio cannot implement this plan alone. In order to successfully implement this regional plan, it will require the partnership of a number of public and private organizations, entities, and agencies throughout the region. The potential role of the various public and private entities and agencies that should implement the plan is as follows:

#### City of San Antonio

The City of San Antonio is the primary implementing agency of Bike Plan 2011. By adopting this plan, the city acknowledges its role and responsibility to take the lead in pursuing the goals and objectives outlined in Bike Plan 2011. In most cases, implementation actions by the City include actual construction of bicycle facilities and implementing programs to educate and encourage new bicyclists. However, there will be several opportunities where the City of San Antonio will need to partner with other entities in order to implement the plan, such as TXDOT, VIA, Bexar County, and other municipalities in the area. The City has a vital role in facilitating and cultivating these relationships.

City departmental roles are described below.

- Office of Environmental Policy**

The Office of Environmental Policy was created in 2008 when City Council adopted a policy on improving the environmental integrity of the city and region and to provide support to develop and implement sustainability initiatives, such as transportation alternatives.

Mission Statement: The Office of Environmental Policy is committed to developing innovative, practical and wide-ranging environmental programs, City policies, and regulating sustaining community-wide quality of life and economic growth.

With the creation of this department, the responsibility of planning for and coordinating bicycling in San Antonio was transferred from the Department of Public Works to the Office of Environmental Policy and the “San Antonio Bikes” program was established. The mission statement of San Antonio Bikes is to increase bike ridership for daily use and improve cycling safety by making the bicycle network accessible, direct and continuous thereby

raising the visibility of cycling as an alternative form of transportation. Bike Plan 2011 has been developed under the supervision of the Office of Environmental Policy.

The primary responsibility of the Office of Environmental Policy in terms of implementing Bike Plan 2011 will include developing and overseeing efforts to improve the environment for bicycling in San Antonio. This includes participating in scoping and design of bicycle facilities, the planning and execution of education, encouragement, and enforcement events, and coordinating among the various departments and agencies that have a role in implementing this plan.

- Department of Public Works**

The Department of Public Works is responsible for development and day-to-day operations and maintenance of the city’s infrastructure, including roads. Public Works is responsible for designing and building bicycle infrastructure, including pavement markings, signalization, and signs. OEP will coordinate with Public Works to implement the design and infrastructure component of this plan.

- Capital Improvements Management Services (CIMS)**

CIMS was created in 2007 with the voter-approved 2007 Bond Program to manage the Capital Improvement Program projects included in the 2007-2012 Bond Program through all phases of design, construction, and inspection. At the time of development of Bike Plan 2011, the City had begun planning for the 2012-2017 Bond Program. Network recommendations of Bike Plan 2011 will be proposed for funding through the Bond Program.

- Parks and Recreation Department**

The Parks and Recreation Department (SAPAR) is responsible for the development and day-to-day maintenance of the City’s parks and off-street trail system. Since 2000, SAPAR has been implementing the Greenway Trails system, which includes building linear trails along the Leon and Salado Creeks and Medina River. These linear trails and their connection to an on-street network are an important element of the bicycle network in San Antonio.

- Development Services**

Development Services enforces the city’s Unified Development Code and other development-related ordinances. This department is responsible for ensuring that infrastructure built through private development conforms with the recommendations of this plan and includes bicycle infrastructure and more walkable and rideable neighborhoods.

- Planning and Community Development**

Having buy-in at the neighborhood level is instrumental in implementing Bike Plan 2011. Planning and Community Development will be vital in coordinating Bike Plan 2011 with other planning efforts across the City, such as Sector Plans, the Major Thoroughfare Plan, Strategic Revitalization Plans, and Reinvestment Area Plans, and the Complete Streets Policy. Planning and Community Development’s strong relationship with neighborhoods will be instrumental in outreach efforts.

- City of San Antonio Police & Fire**

The San Antonio Police and Fire Departments have a significant role in supporting and implementing safety education and enforcement components of Bike Plan 2011.

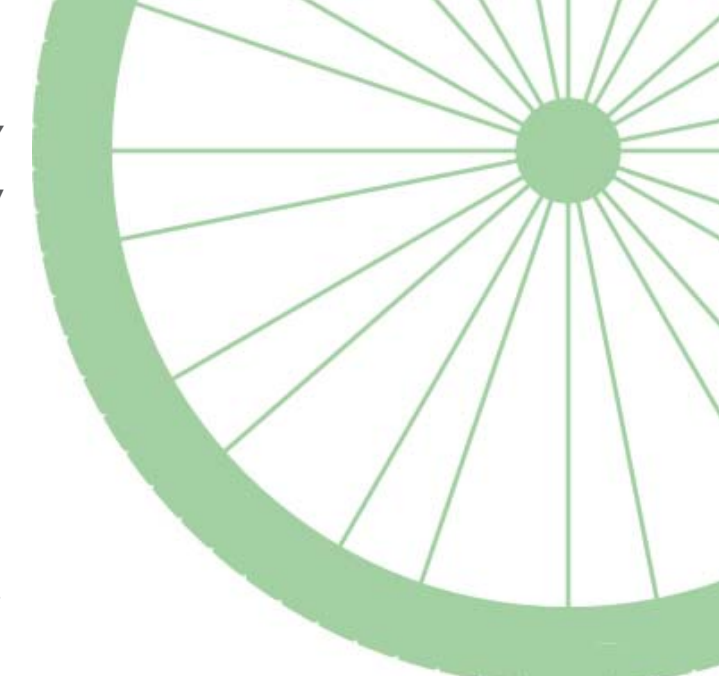
- San Antonio Metropolitan Health District (Metro Health)**

Metro Health’s mission is to provide leadership and services for San Antonio and Bexar County to prevent illness and injury, promote healthy behaviors, and protect against health hazards. As such, the department will help implement Bike Plan 2011 through its policy, systems and built environment initiatives; including highlighting the health benefits of bicycling, B-Cycle Bike Share and bike safety.

Already, Metro Health has taken the lead in implementing various strategies and tactics for bicycling, for example, obtaining grant funding that directly benefits bicycling, and planning and hosting bicycling events, such the City’s cyclovia that is planned for later in 2011.







**San Antonio-Bexar County Metropolitan Planning Organization (SA-BC MPO)**

Metropolitan Planning Organizations were created by Federal law for regional transportation planning, and are the agency through which federal funding is passed down to local governments and agencies. The San Antonio-Bexar County MPO region receives over \$200 million each year for transportation funding. For this reason, the SA-BC MPO plays an important role in implementing Bike Plan 2011.

The agency’s role as a regional planning entity will be instrumental in bringing together municipalities within the MPO area and other agencies to implement a truly regional bicycle network that is well connected. Furthermore, the SA-BC MPO currently provides educational and encouragement programs to advance bicycling, such as the Walkable Community Program and the annual Walk’n Roll activities.

**TXDOT, Bexar Co, and other municipalities**

In order to create a truly connected and regional network with seamless linkages to and from other jurisdictions, we must look beyond political boundaries. There should be no reason to have a gap in the bicycle network because a roadway isn’t owned and managed by the City of San Antonio. It cannot be stressed enough how vital it is that the agencies and municipalities in the region work together to implement Bike Plan 2011.

- **TXDOT** - TXDOT primarily manages major highways such as the interstates, Loop 410, Loop 1604, and other state highways. These roads also tend to be the biggest physical obstacles to a connected network. TXDOT will have an important role in helping the City and region overcome these barriers and making these roadway corridors accessible to bicyclists on a safe and appropriate bicycle facility.
- **Bexar County** - Bexar County primarily manages rural roads in unincorporated areas of San Antonio. There is demand for space for bicyclists along these roads, especially among recreational cyclists. In addition, the County is currently engaged in an effort with the City of San Antonio and San Antonio River Authority to identify capital improvement projects to address flood control. The Flood Control Program presents a one-time opportunity to improve the off-street bicycle

*network along creeks and other drainage corridors that the County manages. This opportunity cannot be lost.*

- **Other Municipalities** - Even local roads could fall victim to changing jurisdiction. The political fabric in San Antonio is complicated in that it includes islands of incorporated areas within San Antonio’s larger jurisdiction, such as Castle Hills, Balcones Heights, Leon Valley, Olmos Park, Kirby, and Alamo Heights. The City of San Antonio and SA-BC MPO should work with and encourage smaller municipalities to develop local bicycle plans for their city and encourage them to look to Bike Plan 2011 for guidance when developing their network and programs. The SA-BC MPO, as the regional planning agency, will be instrumental in reaching out to the suburban cities and providing assistance in development and adoption of a local bicycle plan.

**San Antonio River Authority**

The San Antonio River Authority (SARA) shares responsibility of regional flood control with the City of San Antonio and Bexar County by overseeing the San Antonio River Watershed. In implementing its initiatives for flood control, the agency works to enhance community appreciation for and access to the San Antonio River and its tributaries. In the agency’s most recent initiatives, the San Antonio River Improvement Projects, SARA has constructed multi-use paths along the San Antonio River. Trails are largely in place from downtown to Mission Espada in far-south San Antonio. This trail provides a significant corridor for both recreation and commuting cyclists.

SARA is currently finalizing a community based planning effort for the Westside Creeks Restoration Project. The Alazán, Apache, Martínez, and San Pedro Creeks in near-west San Antonio are tributaries to the San Antonio River and under SARA’s jurisdiction. These channels currently provide adequate flood control protection, but they are unattractive and insensitive to the environment. The project’s mission is to develop concepts to restore the environmental conditions of these creeks, maintain current flood control components, and provide increased opportunities for people to enjoy the urban creeks. Like the San Antonio River Improvement Project and initiatives of the Bexar County Flood Control Program, an opportunity exists to provide bicycle access

along these corridors and connectivity between destinations that cannot be lost.

**VIA Metropolitan Transit**

Creating a comprehensive, well-connected transportation system includes the consideration of the connection among various modes of transportation, including bicycling and mass transit. VIA’s role in implementing Bike Plan 2011 is ensuring bicycle accommodation on the VIA transit system. VIA currently provides service to 98% of Bexar County with a bus only fleet. Planning for Bus Rapid Transit (BRT) is well underway along key corridors in San Antonio. As the VIA network continues to expand geographically as well as to other modes of mass transit, VIA will be responsible for continuing to provide and enhance bicycle amenities at transit centers and stops, as well as ability to transport bicycles on transit vehicles.

**CPS Energy, Utilities, & Railroad Authorities**

Another opportunity for off-street corridors are along utility and rail easements, which provide long, often uninterrupted corridors ideal for multi-use paths and bicycle use.

**Private advocacy and recreational groups**

Private citizens have a role in implementing this plan by participating in public meetings as recommended projects are introduced and designs for specific infrastructure are developed. The bicycling community also has an obligation to provide feedback on the positive results from implementing the recommendations in this plan.



#### IV. MONITORING BIKE PLAN 2011 IMPLEMENTATION

The San Antonio Bike Plan 2011 + Implementation Strategy is a living document and should be updated periodically to assess progress, identify new opportunities, and re-evaluate goals and priorities. Plans are evaluated to obtain information that can guide future decisions. Bike Plan 2011 identifies benchmarks for bicycling to measure implementation. Data should be collected, reported, and evaluated frequently to evaluate ongoing progress and the appropriateness and cost-effectiveness of certain actions.

In 2010, the SA-BC MPO hired ETC, Inc. to conduct a bicycle travel patterns survey to gather data about and better understand bicycle travel in the region. If conducted regularly, this survey can identify growth in bicycle use and improvements in the environment for bicycling. Moreover, the SA-BC MPO Safety Program collects crash data for the San Antonio-Bexar County region. In addition to these resources, other methods for data collection should be explored, such as surveys of certain populations on the use and attitudes toward bicycling.

Finally, maintain an annually updated list of short- and long-term projects of bicycle facility improvements in conjunction with the Public Works Department and the Parks and Recreation Department. This not only helps the City keep track of what projects have been completed, but as the bicycle network grows, it identifies the projects and programs with the highest priority for each fiscal year into the future.

Public engagement and input is a critical component of any process of designing new bicycle facilities and updating, changing, or prioritizing the project list. As the City moves forward in building the network and implementing Bike Plan 2011, it is important to involve neighborhood associations, area stakeholders, and residents or businesses located along the corridor in this process.

#### RECOMMENDATIONS FOR MONITORING PLAN

##### IMPLEMENTATION:

**Recommendation 1: Pursue regular measurement of the benchmarks and report progress towards targets outlined in this plan.**

Regularly collect and maintain local bicycling data to monitor plan implementation. Where necessary, establish baseline measures immediately. Coordinate with appropriate City departments and regional agencies to assist with data gathering and collection. Continue to use existing and expand the use of public surveys to evaluate general use and opinions about bicycling, such as the Bicycle Travel Patterns Survey funded by the MPO in 2010. Annually report to the City Council, Bicycle Mobility Advisory Committee, and other interested committees and boards progress toward implementing the bicycle master plan.

**Recommendation 2: Purchase bicycle counters to conduct periodic bicycle counts.**

Regularly collect bicycling data on the number of bicyclists in the region by conducting periodic monitored bicycle counts throughout the region. Evaluation of this data will reveal overall bicycle usage across the city as well as bicycling trends along specific corridors.

	Goal Statement	Objective	Recommended Actions	Benchmark Target	Baseline Measurement (Current level)	Frequency of Evaluation	Data Source (if not internal documentation)	
Overall Plan Goals	More people bicycling in San Antonio.	To increase the mode share of bicyclist commuters		Increase commute mode share to 0.5% by 2015, 1.0% by 2020, and 2.0% by 2025.	0.08%	Annually	U.S. Census Bureau, American Community Survey	
		To increase the total number of bicyclists for both transportation and recreation		Double the total number of bicycles observed through counts every five years.	to be established	Every five years	Local bicycle counts at key locations across San Antonio	
	A safe environment for bicycling in San Antonio.	To decrease the number of bicycle crashes		Maintain the same number of annual crashes as 2011, while the overall number of cyclists increases.	205 (2008 level)	Every five years - work into MPO's MTP update	Crash statistics gathered through MPO Safety Study and TXDOT sources	
		Improve bicycle friendly community status		Attain silver level by 2015, evaluate potential for gold by 2020.	Bronze	Every 2 years update data	League of American Bicyclists, American Community Survey	
Bicycle Network	Develop a comprehensive network of on- and off-street bicycle facilities.	Address key barriers in the bicycle network	1 - Improve crossings of major barriers at top 20 key locations. Add other key barriers as appropriate.	Make improvements to all 20 identified key barriers by 2020.	NA	Annually		
		Address and resolve issues with parking in bicycle lanes	1 - Pass a resolution for parking-free bicycle lanes across the City of San Antonio.	Pass resolution by 2011.				
			2 - Establish and adopt guidelines and procedures for determining parking modifications where a bicycle lane exists or in the planning and design phase of a new bicycle lane with on-street parking.	Establish and adopt guidelines by 2012.				
			3 - Implement the parking modifications guidelines to address and resolve bicycle lanes with on-street parking.	Reduce the miles of bicycle lanes that have on-street parking that hinder bicycle travel by 25 miles per year.	to be established	Annually		
	Develop a connected and regional network of on- and off-street bicycle facilities	1 - Expand the bicycle network through bicycle facility infrastructure improvements (identified projects).	Add a minimum of 50 miles of new bicycle facilities to the network each year over next five years, independent of facilities created as a part of already programmed roadway projects.	Approximately 625 miles of existing bicycle facilities	Annually			
	Improve bicycle facility maintenance practices.	1 - At a minimum, sweep bicycle lanes on the same schedule as streets are swept. 2 - Acquire one small sweeper dedicated for sweeping bicycle lanes and other bicycle facilities. 3 - Continue to use 311 program for reporting and follow up on maintenance issues. 4 - Restripe existing bicycle lanes on a regular schedule (either as part of street restriping or on a key route basis as needed).	Sweep bicycle lanes on the same schedule as streets; institute by end of 2011.	Request-based				
			Acquire by end of 2011. Sweep high demand bicycle corridors quarterly.	Quarterly	Identify high demand corridors quarterly.			
			Increase response to 311 requests to twice as many complaints resolved per year.	to be established	Annually			
			Conduct a visual survey of all bicycle facilities at least once a year, and restripe as necessary.	Initially, minimum of 10% of network per year	Annually	Visual survey of all bicycle facilities		
	Connect the on-street network with off-street trails and paths to create a comprehensive network of bicycle facilities	1 - Identify and pursue opportunities to connect on-street and off-street bicycle/pedestrian networks. 2 - Provide wayfinding between the trail and on-street networks. 3 - Coordinate with the appropriate agencies to build and maintain a comprehensive off-street network of trails to supplement the bicycle network. 4 - Explore solutions to allow bicyclists on trails beyond current hours of operation.	Increase percentage of trail heads with a direct link from bicycle network to trails.	to be established	Annually			
			Increase percentage of trail heads with associated wayfinding.	to be established	Annually			
			Fund 1 to 2 key off-street projects annually. Conduct quarterly coordination meetings with implementing agencies and departments.		Quarterly			
Identify and implement solution by 2012.								

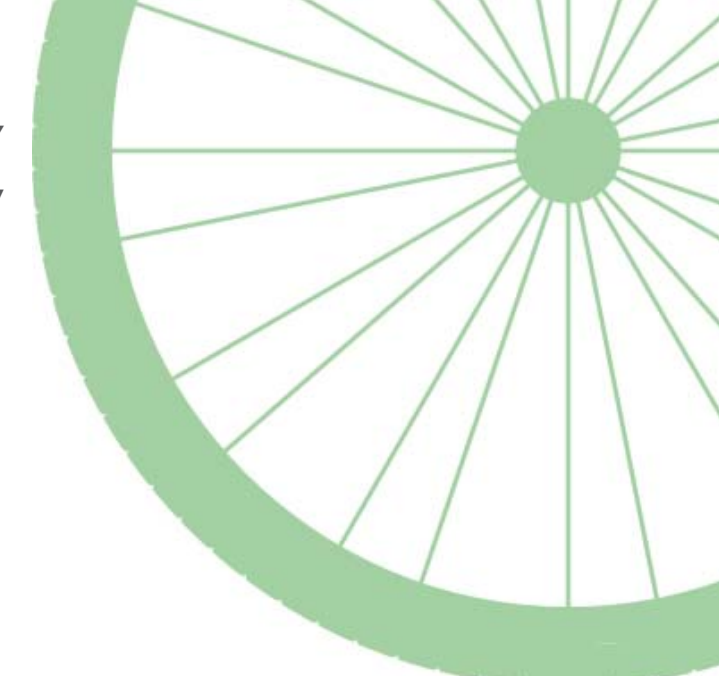


Goal Statement	Objective	Recommended Actions	Benchmark Target	Baseline Measurement (Current level)	Frequency of Evaluation	Data Source (if not internal documentation)	
Network Support Facilities	Develop a system of integrated support facilities that improve the usability of the bicycle network.	1 - Establish design guidelines for a wayfinding system for the San Antonio Bicycle Network.	Establish wayfinding design guidelines by 2012; install wayfinding signage along 50 miles existing of bicycle corridors per year and along all new bicycle corridors.	to be established	Annually		
		2 - Install bicycle information kiosks and network maps in key locations throughout the region.	Establish 5 bicycle information kiosks per year.	to be established	Annually		
		3 - Regularly update the regional bicycle map and distribute.	Update the interactive GIS site monthly and the hard copy of the regional map every 2 to 3 years. Distribute 15,000 maps annually.	to be determined	Varies		
		4 - Establish guidelines for bicycle detours in the event of construction or street closures.	Establish guidelines by 2012 (before implementation of next bond project begins).				
		5 - Integrate the bicycle network into departmental and agency maps across the region.	Send information to other departments and agencies by end of 2011 and reprint maps as scheduled. Update GIS data monthly and make available to all departments, agencies, and development entities.		Annually		
	Provide end-trip facilities that support bicycling	1 - Establish a Bicycle Parking Program to quickly provide bicycle parking at existing destinations throughout the city.	Establish program by 2012; install 1,000 bicycle racks annually.			Annually	
		2 - Provide development incentives to provide end-trip facilities.	Establish incentives by 2012.				
		3 - Provide long-term bicycle parking at regional destinations throughout the city.	Install a minimum of 5 to 10 long-term bicycle parking spaces at a minimum of 2 regional destinations annually (excluding VIA transit centers).			Annually	
		4 - Review and as necessary amend City's UDC for end-trip facilities.	Review UDC immediately; make necessary changes by 2013				
		5 - Ensure provision of bicycle parking at special events throughout the city.	Immediately, establish requirements for large events to provide adequate bicycle parking.	Establish base number of spaces for events in 2012			
		6 - Provide long-term parking and shower and changing facilities at public facilities and office buildings.	Fund the retrofit of three (3) public buildings for shower and changing facilities annually	to be determined	Annually		
		7 - Explore the feasibility of a "bikestation" at a regional center in San Antonio.	If feasible, establish 2 bikestations by 2015. If currently not feasible, reevaluate the demand and feasibility of a bikestation in 2015.		By 2015		
	Improve intersections for safe accommodations for bicyclists	1 - Research signal detection methods that are bicycle-friendly, and as necessary make changes to signal detection at intersections along bicycle corridors.	Increase the percentage of signaled intersections that can detect bicyclists.	to be determined	Annually		
		2 - Establish design standards for accommodating bicycles at intersections.	Establish design standards by 2015.				
	Integrate bicycling with the mass transit network	1 - Work with VIA to increase short-term bicycle parking and provide long-term bicycle parking at transit stops.	Provide a minimum of 10 long term bicycle parking spaces at a minimum of 2 transit centers per year (i.e., 5 per center).	none	Annually		
		2 - Increase bicycle access to all current and future transit centers by prioritizing infrastructure that connects to transit centers.	All transit centers will have a direct connection to a bicycle facility by 2020.	to be determined	Annually		
		3 - Work with VIA to develop a region-wide Safe Routes to Transit Program.	Establish program by 2015. Double the number of bicycles carried on VIA buses by 2015, and triple by 2020.	1,066 (February 2011)	Update seasonally every 1-2 years	VIA bicycles on buses count	
		4 - Work with VIA to increase education and training for bus operators and provide educational materials for bicyclists using transit.	All bus operators receive refresher training on operating procedures as they pertain to bicyclists every 5 years.	to be determined	Annually		
		5 - Based on demand and ability, provide adequate bicycle carrying capacity on VIA buses and transit vehicles.	Identify high bicycle use transit corridors by 2012, and make capacity changes by 2014; re-evaluate every 4 years.		Every 4 years		
		6 - Integrate bicycle transportation in the planning, design, and operation of existing, new, and redeveloped transit facilities.	Conduct quarterly coordination meetings with implementing agencies and departments.		Quarterly		

Goal Statement	Objective	Recommended Actions	Benchmark Target	Baseline Measurement <i>(Current level)</i>	Frequency of Evaluation	Data Source <i>(if not internal documentation)</i>	
<b>Bicycle Programs</b>	<b>Provide educational, encouragement, and enforcement programs that support bicycling in San Antonio.</b>	<b>EDUCATE</b> all road users of all ages and abilities of their rules, rights, and responsibilities.	1 - Create and distribute information on proper use of bicycle facilities.	Integrate bicycle safety information on all bicycle maps by 2012. Distribute 15,000 regional bicycle maps and safety brochures annually.	to be established	Annually	
			2 - Expand the Safe Routes to School efforts to a region-wide program.	Expand to region wide program by 2015. Every student (100%) receives bicycle education at both elementary and middle school by 2020.	local efforts	Monitor program expansion annually	
			3 - Expand bicycle education opportunities.	Increase provision of or support of one new bicycle education each year. Increase the number of people participating in educational programs by 25% annually.	to be established	Annually	
	<b>ENCOURAGE</b> bicycling as a form of transportation and exercise.	Consistently <b>ENFORCE</b> laws of the road.	1 - Garner bicycle commuting support from the Mayor.	Annually, schedule a mayoral proclamation and riding event in support of bicycle commuting during bike month (May)		Annually	
			2 - Incentivize bicycle commuting to City employees.	Evaluate effectiveness of existing program to encourage bicycling, and if and where necessary increase incentives by 2013.	to be established	Evaluate program effectiveness every 3 years.	City employee survey
			3 - Incentivize bicycle commuting for the region's employers.	Enlist 100 new employers to provide bicycle incentives to employees annually. Increase NuRide membership to 10,000 members by 2020.	to be established	Annually	Employer survey
			4 - Analyze student transportation options when building new schools.	Evaluate bicycle options for students for every new elementary and middle school	3,890 (2008)		
			5 - Implement a citywide social marketing program.	Continue the Get Cyched media campaign, and increase funding for marketing by 10% annually	to be established	Annually	
			1 - Implement regular training for officers on road safety for all users.	Increase percentage of bike-certified officers to 75% by 2015; 85% by 2020; and 100% by 2030.	Approximately \$100,000 annually	Annually	
			2 - Enhance and expand the police bicycle patrol fleet, and encourage other municipalities to establish Bicycle Patrol fleets.	Increase bicycle patrol fleet by 5% annually.	62% of officers & Sergeants	Annually	
			3 - Establish a volunteer bicycle fleet to accompany group rides.	Establish a volunteer bicycle fleet for group rides by 2015.	23 members		
			4 - Pass a helmet use law for young bicyclists.	Adopt ordinance by 2012.			



Goal Statement	Objective	Recommended Actions	Benchmark Target	Baseline Measurement (Current level)	Frequency of Evaluation	Data Source (if not internal documentation)	
Implementation Strategy	<b>Dedicate funding, political commitment, and partnerships to implement the facilities and programs in this plan.</b>	1 - Pursue and acquire maximum available funding from state, federal, and other available sources.	Submit at least one application for every available funding opportunity. Obtain at least \$2 million in grant funding annually to implement Bike Plan 2011.	to be established	Annually		
		2 - Increase funding from the Advanced Transportation District fund for the installment of new bicycle facilities.	Increase the amount of dedicated funding from the Advanced Transportation District fund to \$150,000 to \$200,000 annually.	\$50,000 annually	Annually		
		3 - Incorporate bicycle facilities construction and maintenance as an integral part of all roadway projects, rather than requiring separate funding sources.	Incorporate the design and construction of bicycle facilities into all roadway projects by 2013.				
		4 - Identify and pursue funding partnerships and support from other local agencies and City departments.	Conduct quarterly coordination meetings with implementing agencies and departments.		Quarterly		
		5 - Increase Bicycle Program staff in appropriate departments in the City.	Permanently fund the equivalent of 4 full time employees for bicycle planning, program management (of encouragement and education programs), and facility design and construction in the Office of Environmental Policy and Public Works Department by FY 2012-2013.	1.5 FTE (permanent, non-grant funded positions)	Annually		
	Institutionalize bicycle planning through new or revised policies, code amendments, operating procedures, and citizen advisory committees.	1 - Increase citizen oversight with regards to bicycling needs and implementing the bicycle master plan.	Establish the chair of the BMAC as a voting member of the MPO Transportation Policy Board by FY 2011-2012. Establish a bicycle advocate on 2 City of San Antonio advisory boards or committees annually.		NA	Annually	
		2 - Modify planning and design documents and regulations to reflect the goals and recommendations of Bike Plan 2011.	Review documents immediately; make changes where necessary by 2013				
		3 - Adopt a citywide resolution or policy statement requiring the design of bicycle facilities as part of new or reconstructed roadways, and require exception statements for projects that exclude bicycle facilities.	Adopt resolution by end of 2011.				
		4 - Work closely with the Planning and Development Services Department on planning documents such as Sector Plans, Reinvestment Area Plans, the Comprehensive Plan, Complete Streets Policy, and Neighborhood Plans to include a bicycle component.	Meet quarterly (or as necessary) with the Planning and Development Services Department to review long-range plans and inclusion of bicycle components.		Quarterly		
		5 - Include review by Bicycle Program of master development plans to ensure connections to the bicycle network.	Integrate bicycle review into development review process by 2012.				
		6 - Incorporate maintenance of bicycle facilities as component of regular street maintenance programs, such as resurfacing, restriping, and street sweeping.	Incorporate bicycle facilities into maintenance procedures by end of 2011.				
		7 - Educate appropriate City staff related to bicycle planning and facility design on current bicycle facility design best practices.	All staff involved with bicycle planning and facility design should receive training on bicycle issues every 2 years.		Every two years		
	Engage and coordinate with other departments, agencies, and organizations to leverage resources and strengthen implementation efforts.	1 - Coordinate with other City of San Antonio departments, agencies, and organizations where necessary to implement Bike Plan 2011.	Conduct quarterly progress evaluation meetings with Technical Advisory Group.			Quarterly	
		2 - Maintain seats on the SA-BC MPO BMAC that represents the City of San Antonio Office of Environmental Policy, Public Works, Parks and Recreation, San Antonio Police, and Planning and Community Development Departments.					
	Periodically monitor implementation progress and update the master plan on a regular basis.	1 - Pursue regular measurement of the benchmarks and report progress towards targets outlined in this plan.	Evaluate benchmarks on a regular basis, as established by the frequency of monitoring.			Annually	
		2 - Purchase bicycle counters to conduct periodic bicycle counts.	Purchase by 2012. Conduct counts seasonally and annually.			Seasonally; annually.	
		3 - Maintain a short- and long-term project list of bicycle facility improvements and update annually.	Update the project list annually.			Annually	



**Recommendation 3: Maintain a short- and long-term project list of bicycle facility improvements and update annually.**

The estimate to build the first two tier priority bicycle facilities is approximately \$15 million to \$20 million. An order-of-magnitude cost projection for complete build out of the entire bicycle network is estimated to cost approximately \$250 million to \$275 million. This includes approximately \$129 million for new paths to create an urban trails network that can accommodate bicyclists.

Bike Plan 2011 identified Tier 1 and Tier 2 priority projects for the next 3 to 7 years based on a prioritization methodology that identified certain safety, connectivity, destination, implementation, and community support criteria. (See Chapter 3: Bicycle Network for a more detailed discussion of this methodology.) Annually, this project list should be updated to reflect completed projects, and additional projects should be identified based on this prioritization criteria. A Prioritization Criteria Checklist has been developed to guide decisionmakers.

**San Antonio Bicycle Master Plan  
Prioritization Criteria Checklist**

Project Street: \_\_\_\_\_  
 Project Location (from, to): \_\_\_\_\_  
 Facility Type: \_\_\_\_\_

Criteria	Y / N
<b>Safety</b>	
Location of bicycle crash	
<b>Proximity to Attractors/Destinations</b>	
Connects to major employer(s)	
Connects to primary or secondary school (grades K-12)	
Connects to a bus stop	
Within 3 miles of existing or planned transit facility <i>(Transit facilities = park and ride, or rail station)</i>	
Connects to or is within Downtown	
Connects to or is within Medical Center	
Connects to higher military institution	
Connects to higher education institution	
Connects to Linear Creekway Trail	
Connects to San Antonio River Trail	
Connects to public places <i>(Public Places = parks, libraries, other civic uses)</i>	
Connects to shopping centers <i>(Shopping center = at least 40,000 sq. ft. of retail space)</i>	
<b>Connectivity</b>	
Overcomes physical barrier in route (e.g., freeway, railroads, river)	
Connects to existing bicycle routes or facility in the bicycle network	
Completes gap of existing facilities in bicycle network	
Upgrade of existing facility or route in network	
Identified as part of the regional or city network	
<b>Implementation</b>	
Does not require roadway pavement widening or acquisition of right of way	
Does not negatively impact vehicular levels of service	
<b>Community Support</b>	
On the Bicycle Master Plan recommended network	
Recommended in the MPO Transportation Plan	
Recommended by community feedback	
Identified route in MPO's Bicycle Travel Patterns Study conducted in August 2010	
Adopted in a Neighborhood Plan, Sector Plan, or other local plan	
<i>Community feedback defined by input received during the Bicycle Plan Update planning process.</i>	
<b>Final Ratio (ratio of Y to N)</b>	

