



THE CITY OF ARLINGTON, TEXAS

HIKE AND BIKE SYSTEM MASTER PLAN



EXECUTIVE SUMMARY



A collaboration between the Community Development and Planning Department and the Parks and Recreation Department

Acknowledgements

Key Partners

City of Arlington
Texas Department of Transportation (TXDOT)
North Central Texas Council of Governments (NCTCOG)
Arlington Independent School District
University of Texas at Arlington

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Arlington at a Turning Point

The City of Arlington is at a turning point in its history. Arlington has more than 370,000 residents, is the 49th largest city in the United States, and is part of the fourth largest metropolitan area in the United States.¹ It is home to the Entertainment District which includes the Cowboys Stadium, Texas Ranger's Ballpark, Six Flags over Texas, Hurricane Harbor, Arlington Convention Center, and the International Bowling Museum and Hall of Fame. The University of Texas-Arlington is located in Downtown Arlington and has a student population of over 28,000. Even with all these attractions and growth, Arlington still faces challenges, such as improving mobility choices and promoting health and wellness.

Planning today is necessary to meet the community and facility needs of tomorrow. Hike and bike facilities are an especially important part of this planning effort. They are critical if Arlington wants to offer transportation choices, improve safety, enhance community health and wellness, and improve economic competitiveness. The City can overcome its traditional shortfalls in hike and bike facilities by developing an integrated, safe, and convenient multi-modal transportation system.

This Hike and Bike System Master Plan represents a strong City commitment to:

- ***affordable personal mobility,***
- ***carbon-free transportation, and***
- ***healthy, active lifestyles for Arlington residents.***


The primary goal of this Master Plan is to create an integrated, seamless transportation and recreation framework to facilitate hiking and biking as viable transportation alternatives throughout Arlington. The Plan defines an important connection between public health and the diminishing access to outdoor landscapes and provides action-oriented guidance for the development of an interconnected system of greenways, on-road bicycle facilities, and sidewalks.


The Hike and Bike Plan is a comprehensive action plan that contains the findings of a year-long planning process that included input from area residents, City staff, a project Steering Committee, and community groups.


¹ 2009 Population Estimates. United States Census Bureau, Population Division. 2010-06-22.


The Process

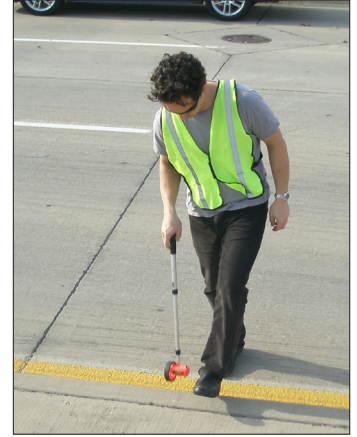
In November 2009, the City of Arlington began this planning effort with a kick-off meeting for the Steering Committee and public. The Steering Committee was composed of City staff, key stakeholders, and active citizens. Multiple committee meetings occurred during the planning process with members providing input on project goals, visions, facility needs, priorities, and the Draft Plan.

 *The winter of 2009-2010* was dedicated to field research, the analysis of GIS data, and the analysis of existing plans and policies/codes. The first public workshop was held in January 2010 with 250 citizens attending, providing input on maps and comment forms.

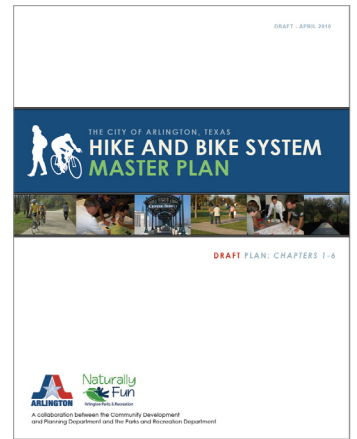
 *During the spring of 2010*, the draft hike and bike network was developed based on fieldwork, input from the public and Steering Committee, and GIS analysis. In April, over 100 citizens attended the second public workshop, providing feedback on the preliminary hike and bike system recommendations. The project team also held a bicycle ride in Downtown Arlington, involving elected officials, police and fire departments, project staff, and citizens (Bicycles Inc. provided bicycles and helmets).

 *In the summer of 2010*, a full Draft Plan was developed that incorporated feedback from the public and Steering Committee. The Plan was comprehensive, addressing not only segment-by-segment recommendations for the hike and bike network, but also focused on bike parking, programs, policies, design guidelines, and implementation strategies.

 *During the fall of 2010*, approximately 100 citizens attended the third public workshop. The City of Arlington, its elected officials, and the general public provided comments and revisions. The Final Plan was adopted by City Council on _____.



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- 1) Field research
- 2) Draft Plan
- 3) Public workshop

Vision Statements

Hike and bike connectivity (through sidewalks, crosswalks, bicycle lanes, multi-use paths, signed routes, bicycle parking, etc.) will be improved by removing gaps in the current system and connecting neighborhoods, parks, shopping centers, schools, employment centers, greenways, and entertainment venues throughout Arlington.

- Biking, hiking, and trail design will be incorporated into all future development/roadways and during roadway reconstruction/repair.
- Education, encouragement, and enforcement programs will be enhanced and added to increase program participation and safety, building courtesy between drivers and cyclists.
- A user-friendly hiking and biking map will be made available to residents to provide information on routes and education. The map will be updated every two to three years.
- Hike and bike facilities will be built properly with safety as a priority in all cases, providing adequate and safe separation of space for bicyclists and pedestrians, using consistent design standards.
- Bicycle parking and bicycle stations with rental system opportunities will become common throughout Arlington providing opportunity and convenience for bicyclists.

More people will choose to hike or bike to their destination instead of driving.

Hike and bike routes in Arlington will be connected regionally with neighboring cities.

Arlington will achieve greater economic vitality through walkable and bikeable spaces.

Arlington citizens and leaders will become more aware of the economic and health benefits of a more walkable and bikeable Arlington.

Bicycle and pedestrian policy will be integrated into City codes, and a hike and bike culture will be integrated into Arlington life.

Hike and bike routes will connect and be more comprehensive, thereby reducing motor vehicle traffic congestion and improving air quality.

Further hike and bike accommodations will support users of all types including recreational, utilitarian, and commuter users.

Safer pedestrian crossings will be installed with marked crosswalks and countdown signals.

Health and Wellness & Alternative Transportation

It is well documented that an active community is a healthy community. The declining health of America's population is alarming. Study after study affirms that sedentary lifestyles and prolonged periods of inactivity are major deterrents to health, leading to a rise in the occurrence of cardiovascular disease, hypertension, diabetes, osteoporosis and some cancers. Land use and transportation are quickly becoming areas of focus as communities strive to become more walkable, bikeable and accessible. Transportation safety and enhanced mobility along with the pattern and density of development are proven corollaries to community health and wellness.

Safer roadways, greenways, and improved facilities for pedestrians and bicyclists, aid in safety, improve the environment, and encourage more people to enter the outdoors for transportation, recreation, and day-to-day activities.



1



2



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1. Cyclists on an Arlington trail.
2. Pedestrians at Bob Cooke Park
3. Utility bike for everyday trips, like grocery shopping (image from www.yubabike.com)

Assessing Needs and Opportunities

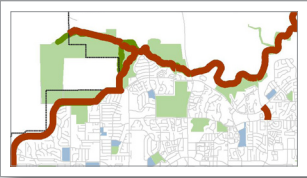


School bike rack

Fieldwork and Analysis

The consultant team conducted an in-depth analysis, photo inventory, and evaluation of current conditions for biking and walking:

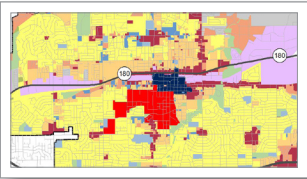
- 190 intersections were inventoried (including photos) for pedestrian crossing facilities. Pedestrian treatments were recommended for each intersection.
- Over 200 miles of arterial, collector, and some local roads were analyzed and measured for possible on-road bicycle facilities.
- Special attention was paid to school areas, the Downtown area, roadway crossings, and key destinations.



GIS data for the Veloweb

Geographic Information Systems (GIS)

GIS data for existing trails, sidewalks, and bicycle facilities was supplemented with aerial photography, transportation data, trip attractors, schools, parcels, waterways, etc. to provide a comprehensive map and tool for developing the recommended hike and bike network. These data resources revealed numerous gaps in the existing sidewalk system and opportunities for new facilities.



Snapshot of the City's Land Use Plan

Existing Plans

Numerous plans, guidelines, and strategies have addressed issues relating to hike and bike facilities in Arlington. They have addressed land use, alternative transportation, roadway design, open space, parks and recreation, and other initiatives. Special consideration was given to current community plans, policies, and documents to better integrate this Hike and Bike Plan into the fabric of area planning efforts, and to incorporate the insights, visions, and findings of other plans as appropriate.



Public input map

Public Input

Public input was gathered through three public meetings and an online comment form. Input at the public meetings was gathered in the form of map markups and comments and through discussion between the citizens, consultant, and City staff. Over 450 people attended the three public workshops showing strong support for the goals of this Plan.



A worn footpath in absence of a sidewalk

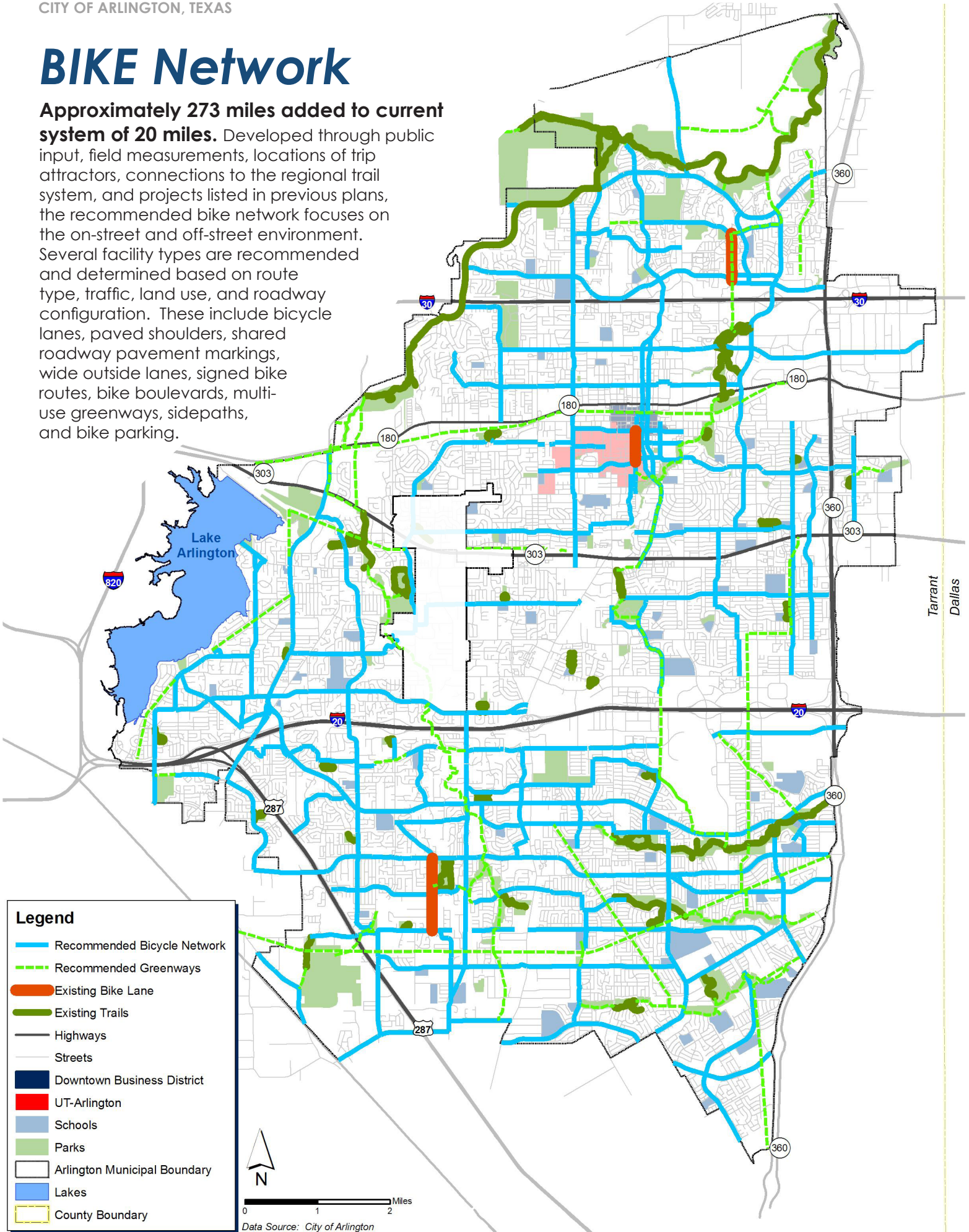
Needs Analysis

The need and demand for a more accessible, safe and functional hike and bike system is paramount throughout the City of Arlington. US Census data modeling revealed that at least 245,000 pedestrian trips and 28,000 bicycle trips happen daily in Arlington. Health and wellness issues, bicycle and pedestrian crashes, levels of service, and community input all point towards the need for safe, functional accessibility to the outdoors. These needs can be met through a comprehensive system of on-road and off-road hike and bike facilities along with the programs, policies, and funding to support this endeavor. This is clearly articulated by the residents who attended open house meetings.

BIKE Network

Approximately 273 miles added to current system of 20 miles.

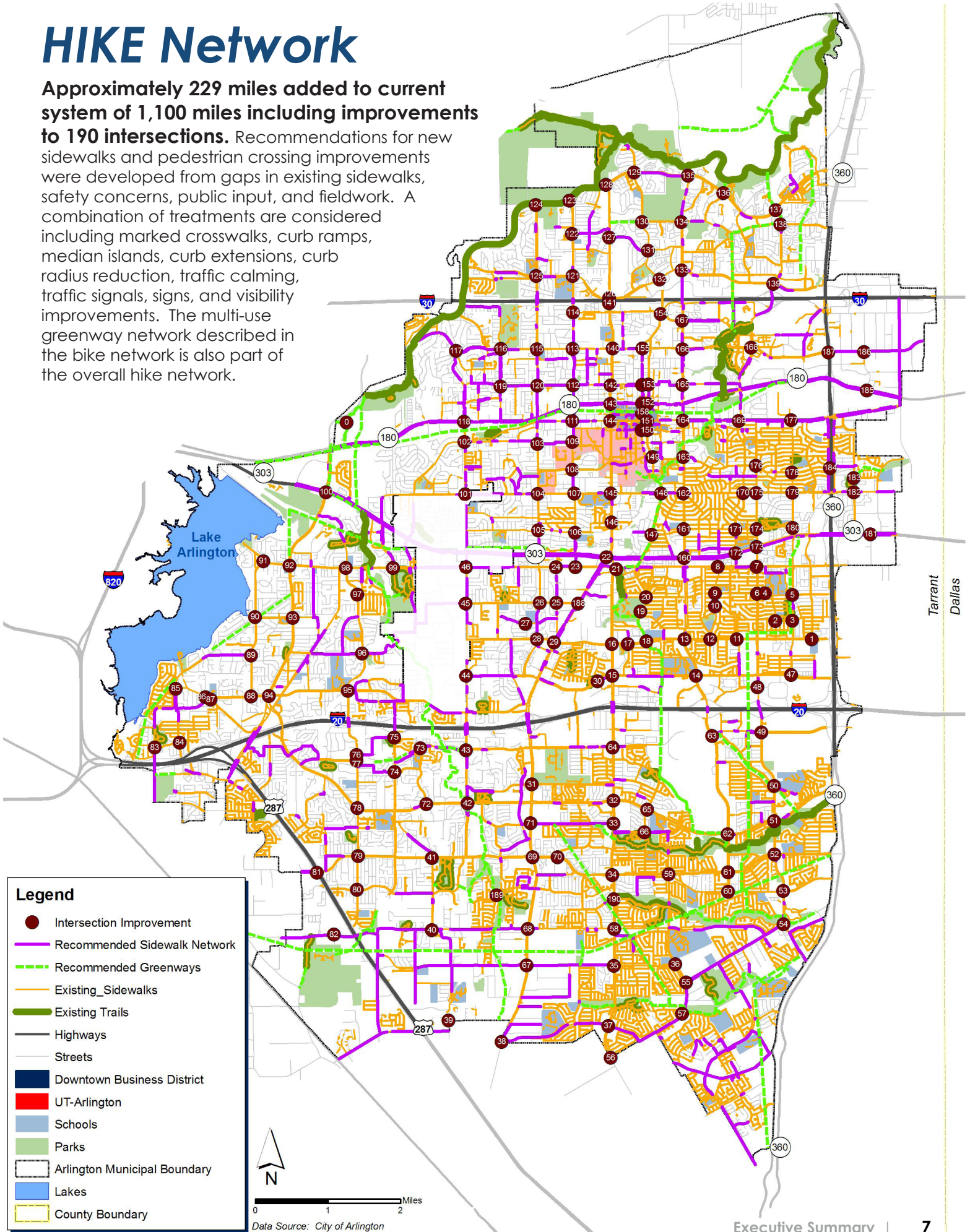
Developed through public input, field measurements, locations of trip attractors, connections to the regional trail system, and projects listed in previous plans, the recommended bike network focuses on the on-street and off-street environment. Several facility types are recommended and determined based on route type, traffic, land use, and roadway configuration. These include bicycle lanes, paved shoulders, shared roadway pavement markings, wide outside lanes, signed bike routes, bike boulevards, multi-use greenways, sidepaths, and bike parking.



HIKE Network

Approximately 229 miles added to current system of 1,100 miles including improvements to 190 intersections.

Recommendations for new sidewalks and pedestrian crossing improvements were developed from gaps in existing sidewalks, safety concerns, public input, and fieldwork. A combination of treatments are considered including marked crosswalks, curb ramps, median islands, curb extensions, curb radius reduction, traffic calming, traffic signals, signs, and visibility improvements. The multi-use greenway network described in the bike network is also part of the overall hike network.



Legend

- Intersection Improvement
- Recommended Sidewalk Network
- - - Recommended Greenways
- Existing_Sidewalks
- Existing Trails
- Highways
- Streets
- Downtown Business District
- UT-Arlington
- Schools
- Parks
- Arlington Municipal Boundary
- Lakes
- County Boundary



Hike & Bike Programs

Creation of a successful Hike and Bike System will involve more than facility improvements. The long-term success of the network will also depend on related programming and education.

It will be critical for the City of Arlington to:

- *inform pedestrians, bicyclists, and motorists about safe behaviors in a multimodal roadway environment,*
- *enforce laws that make pedestrian and bicycle travel safer,*
- *encourage people of all ages and abilities to use the hike and bike facilities, and*
- *promote and develop programmatic activities that encourage physical, activity and healthy living.*

Key recommended programs include:

- *the formation of an HBAC (Hike and Bike Advisory Committee),*
- *Safe Routes to School initiatives,*
- *Bicycle-friendly community status,*
- *a user-friendly Hike and Bike map and website that features existing routes and related information,*
- *targeted enforcement in locations of past accidents involving pedestrians or bicyclists,*
- *internal staff training, and*
- *Bike/Walk to Work Day events.*

These programs will enhance the overall health and wellness of the community by promoting, teaching, and enforcing safety.



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1. *On-road bicycle skills workshop*
2. *Safe Routes to School event*
3. *Arlington City Council Bike Ride (2010)*
4. *Bicycle Rodeo - an education/encouragement event*

Implementation: Realizing the Vision

Implementing the recommendations within the Hike and Bike System Master Plan will require leadership on the part of the City of Arlington and a dedication to the development of a hike and bike friendly community. *The City of Arlington has several opportunities that can help propel implementation:*

- ***First, is the extensive grassroots interest among citizens and local groups such as “Bike Friendly Arlington” that can provide a voice and support for the Plan. An advocacy group should champion this Plan to support implementation.***
- ***A second opportunity is building upon Arlington’s great system of existing greenways, sidewalks, and destinations.***
- ***A third opportunity is to take advantage of the region’s growth by developing facilities as part of future development and construction. These opportunities provide a base and starting point for development and implementation.***

Hike and bike facilities were prioritized by their ability to provide connectivity, serve underserved areas, and improve safety in areas of concern. Higher priorities were also assigned to facilities that could be installed at a lower cost. It is recommended that these facilities be built first to have an immediate impact on the City of Arlington.

Implementing the recommendations of this Plan will require a combination of funding sources that include local, state, federal, and private money. It will be necessary for the City of Arlington to secure funding to undertake the short-term, top priority projects while simultaneously developing a long-term funding strategy to allow for continued development of the overall system. Community foundations and revenue-generating programs for hike and bike facilities should also be utilized to raise funds for development and maintenance.

Trail bridge at
River Legacy
Park



Project Cutsheets and Development

A variety of tools provide Arlington with a quick reference for facility development. Approximately 30 individual cutsheets for both high priority on-road and off-road bicycle facilities and sidewalk improvements have been developed. The entire hike and bike network has also been broken down into a grid providing 18 clear, legible maps.

Roadway construction and reconstruction projects offer excellent opportunities to incorporate facility improvements for non-motorized modes. It is much more cost-effective to provide hike and bike facilities in conjunction with these projects than to initiate the improvements later as "retrofit" projects. Approximately 80 miles of low-cost "retrofit" projects have been identified for on-road bicycle lanes through simple striping, restriping, or road diet procedures. Roadway design guidelines are provided for project development and are important policy documents because they describe the types of facilities that should be provided during construction and reconstruction projects.



Existing conditions at the intersection of Brown and Lincoln.



Photo visualization showing a bicycle lane.



Existing conditions along Tucker Blvd.



Photo visualization showing the addition of a bike lane.

Policy/Administrative Action Steps

1

Consider Adoption of this Plan

The most important action step for the City of Arlington is to adopt, publicize, and champion this Plan. This should be considered the first step in implementation. Through adoption of this document and its accompanying maps as the City's official bicycle, pedestrian, and trails plan, Arlington will be better able to shape transportation and development decisions so that they fit with the goals of this Plan. Most importantly, having an adopted Plan is extremely helpful in securing funding from state, federal, and private agencies. Adopting this Plan does not commit the City to dedicate or allocate funds, but rather indicates the intent of the City to implement this Plan over time, starting with these key action steps.

2

Create an Implementation Strategy

The City of Arlington should develop an internal strategy to implement the Hike and Bike System Master Plan. As a part of this strategy, the City should identify specific individuals and program areas that will be responsible for implementing the various aspects of the Plan from day-to-day efforts to long range goals. The City of Arlington should also consider establishing a Hike and Bike Advisory Committee (HBAC) to assist in implementation. Such a committee should focus on education, advocacy, partnerships, events and community service. It should provide a communications link between the citizens and the City, as well as an avenue for reviewing/revising project priorities.

3

Consider Adoption of a "Complete Streets" Policy

There is a growing national trend towards integrating bicycling, walking and transit as a routine element in roadway projects. This movement has developed under the name of "Complete Streets," which is defined by the Complete the Streets Coalition as follows:

"Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a complete street."

- www.completethestreets.org

By adopting a "Complete Streets" policy, the City of Arlington commits to developing new roadways and reconstructing existing roadways to accommodate all users.

4

Become a Bicycle Friendly Community (BFC)

The BFC campaign is an awards program that recognizes municipalities that actively support bicycling. A BFC provides safe accommodation for bicycling and encourages its residents to bike for transportation and recreation. Communities that are bicycle-friendly are seen as places with a high quality of life, and becoming a bicycle friendly community often translates into increased property values, business growth and increased tourism.

5

Launch Programs

The City of Arlington should continue, expand and develop education, encouragement, and enforcement programs, including the Safe Routes to School program. These programs will bring increased visibility to the process and educate the public about hiking and biking safety.

6

Begin Top Priority Projects

Top priority projects identified during this study provide an immediate impact where there is need. The on-road bike priority projects are low-cost and “shovel ready.” The City should establish a process of incorporating hike and bike network recommendations during future funded roadway improvements.

Additional Resources

In addition to these strategies and tools, the Hike and Bike System Master Plan includes other implementation resources. A list of funding sources is included to help Arlington take advantage of its available options. Design guidelines for hike and bike facilities are provided to meet facility development needs and serve as a guide for minimum standards. Policy recommendations are geared at updating language in City codes and planning documents to ensure that hiking and biking needs are addressed in future development. For example, a bicycle ordinance was crafted to further institute bicycling as a legitimate form of transportation and to improve safety and includes helmet requirements, riding restrictions, and a policy against harassment of bicyclists.

Download project resources for the Hike & Bike Master Plan at:

www.greenways.com/arlington