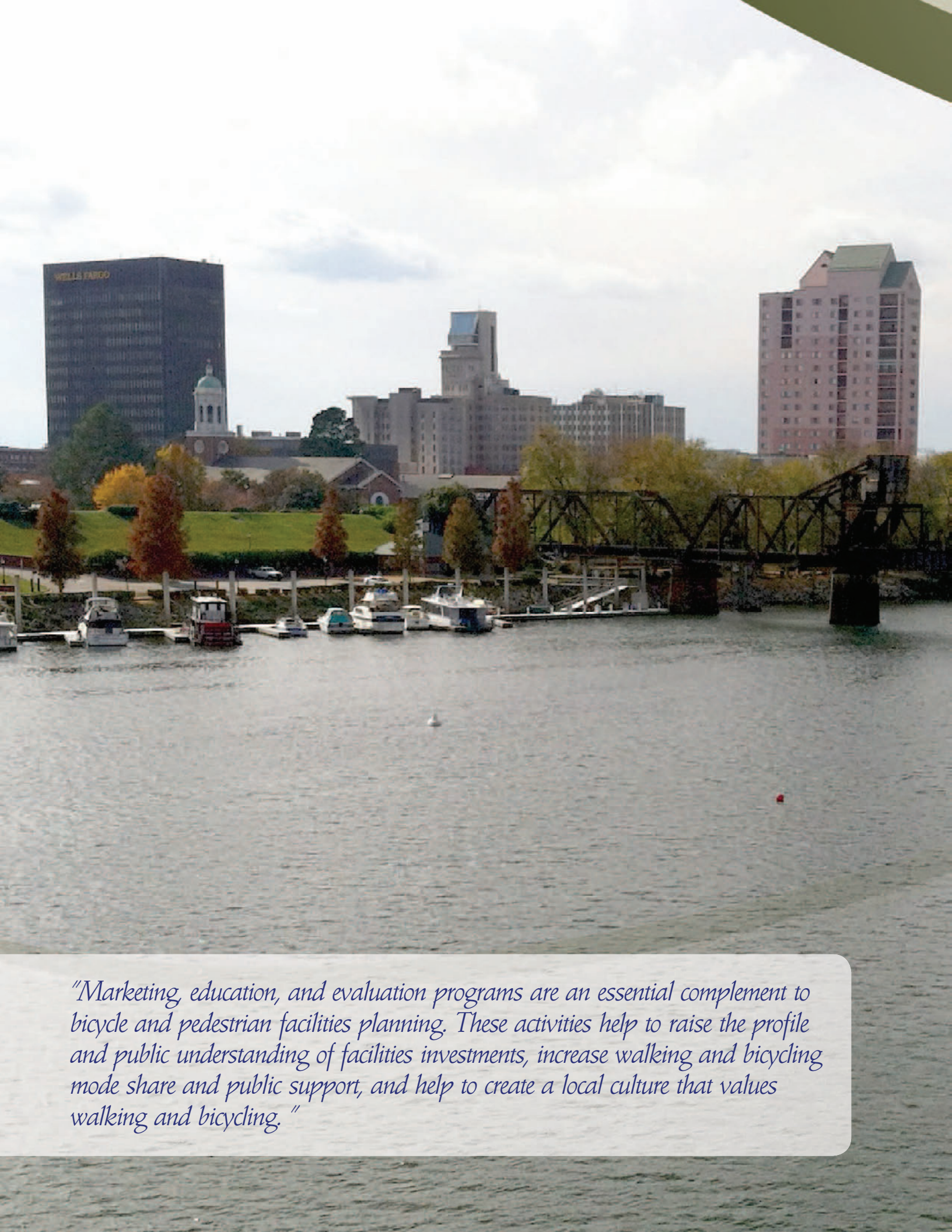


"Marketing, education, and evaluation programs are an essential complement to bicycle and pedestrian facilities planning. These activities help to raise the profile and public understanding of facilities investments, increase walking and bicycling mode share and public support, and help to create a local culture that values walking and bicycling."

Chapter Six

Bicycle and Pedestrian Program Recommendations

Introduction

Marketing, education, and evaluation programs are an essential complement to bicycle and pedestrian facilities planning. These activities help to raise the profile and public understanding of facilities investments, increase walking and bicycling mode share and public support, and help to create a local culture that values walking and bicycling.

The purpose of this chapter is to provide a set of programmatic recommendations for the four non-infrastructure "E's" of bicycle and pedestrian planning: Encouragement, Education, Enforcement, and Evaluation. These initiatives can be undertaken by local agencies and community organizations.

Program concepts were developed by the technical team and were based on:

- knowledge about existing programs in the region and states;
- the Vision, Goals and Objectives developed for this planning effort;
- stated community needs and concerns (as communicated through stakeholder interviews, public meetings and surveys, and discussions with the client team and Project Steering Committee);
- and the consultant team's knowledge about national model programs and best practices.

Additionally, this chapter is intended to assist municipalities in the ARTS region in their efforts to reach the status of a nationally designated Walk-Friendly and Bicycle-Friendly Community. For each program, we have provided information about the program purpose, a description of the basic approach and, wherever possible, links to model programs and useful resources.

Role of the Augusta Regional Transportation Study

ARTS, as a regional agency already engaged in transportation demand management, inter-jurisdictional coordination, and regional cooperation, should play the following roles:

- **Convener**: Bring the right people and organizations together.
- **Coordinator**: Assist interested parties in working in concert.
- **Adviser**: Develop expertise around education, promotion and marketing, and become the repository of institutional memory.
- **Unifier**: Create a regional identity and brand that serves as a rallying point for public involvement in walking and bicycling issues.
- **Monitor**: Develop an evaluation strategy, ensure that evaluation metrics are collected and report back to funders, stakeholders, decision-makers and the general public about the results of education, promotion and marketing efforts.
- **Funder**: Fund education, promotion and marketing efforts directly, when possible, and indirectly, by leading and participating in efforts to secure additional funding.
- **Implementer**: Where there is no clear existing implementing agency or where ARTS is the uniquely qualified agency to act (such as in the area of train-the-trainer programs), consider directly creating and implementing programs to fill the void.

The counties and municipalities within ARTS can and should also play these roles in the geographies over which they have jurisdiction. The Lower Savannah Council of Governments (LSCOG) may also fulfill some of these roles

in the South Carolina portion of the region, especially in unincorporated Aiken County.

Existing Statewide Programs

GEORGIA DEPARTMENT OF TRANSPORTATION

The Georgia Department of Transportation (GDOT) provides a guidebook, Georgia Bike Sense, to teach both bicyclists and motorists about safe behaviors in sharing the roadway. This guidebook instructs people on roadway rules, etiquette, and safety issues, and a listing of local, state and national bicycle resources are also provided. The guidebook is available online for download and may be printed by local communities for use.

GDOT also provides information and

The Georgia Department of Transportation (GDOT) provides a guidebook, Georgia Bike Sense, to teach both bicyclists and motorists about safe behaviors in sharing the roadway. (http://www.dot.ga.gov/travelingingeorgia/bikepedestrian)

applications for Safe Routes to School Programs that help to educate young people on safety. Localities may take advantage of these programs to increase awareness and provide recommendations on needed improvements. A state advisory committee with representatives throughout Georgia oversees this program in the state and helps to develop and recommend program improvements. Within Georgia, the ARTS region is geographically located within the Coastal Region. A Safe Routes to School Outreach Coordinator for this region is available to help staff obtain regular information on the outcomes of these committee meetings and to offer insight into how to improve safety programs within the region to keep pace with statewide efforts.

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

The South Carolina Department of Transportation (SCDOT) Bicycle and Pedestrian Program provides a guide of safety tips for bicyclists and pedestrians as well as state route maps on their website. Links to a number of programs within the state related to bicycle and pedestrian awareness are also provided, including statewide public safety crash data and health related education awareness programs. SCDOT additionally houses the state's Safe Routes to School program. Regional Safe Routes to School offices serve the role of "resource center" and collaborator for communities advancing Safe Routes to School initiatives.

The Bikes Belong Coalition and the League of American Bicyclists advocacy organizations have also awarded a "Complete Streets" grant to SCDOT to implement bicycle and pedestrian policies and to improve conditions for bicycling and walking. The grant supports research, training and evaluation programs for the state. SCDOT, the League of American Bicyclists, the Palmetto Cycling Coalition, and other local advocacy groups work to support implementation of this grant program.

GEORGIA BIKES!

Georgia Bikes is a non-profit organization that works to improve bicycling conditions and promote bicycling throughout the state of Georgia. The organization provides safety tips for bicyclists and motorists and works closely with local bicycling advocacy groups around the state. Georgia Bikes hosts bike rides and events, including a ride to the Georgia Capitol. Resources for school teachers, non-English speaking adults, law officers, legislators, Safe Routes to School advocates, and others are available on the Georgia Bikes website.

PALMETTO CYCLING COALITION (PCC)

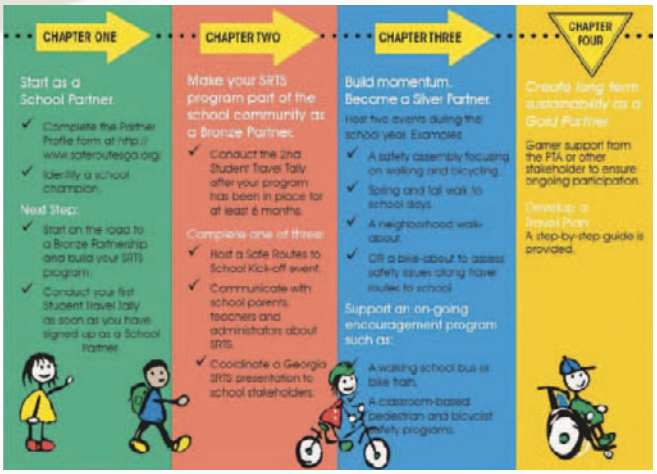
The Palmetto Cycling Coalition (PCC) is a non-profit organization dedicated to making South Carolina more bicycle friendly for everyone. PCC offers a number of education and training workshops, including adult bicycle driving classes, league certified bicycle instructor courses and law officer training education. Previously, PCC also initiated a bike lights program, whereby they are able to partner with organizations and local governments to provide bicycle lights and safety informational brochures to cyclists in need.

A Safe Streets Save Lives Campaign has also recently been initiated by PCC as a public private partnership program to promote bicycle safety and reduce the number of bicycle crashes across the state. Recently, a DVD was developed for the campaign, which has been shown within the state at local community facilities to enhance safety awareness. In May 2011, this DVD was shown in Aiken at the River of Life Church and was advertised through local bicycle advocacy groups.

Existing Regional and Local Programs

SAFE ROUTES TO SCHOOL PROGRAMS

Safe Routes to School Programs (SRTS) provide funding for school based programs which encourage bicycling and walking to school. This typically involves examining conditions around public schools and providing programs to improve bicycle/pedestrian safety, accessibility and use. Lewiston Elementary School in Columbia County was recently awarded a Safe Routes to School grant. Schools in Richmond County that have participated in this program include C.T. Walker Traditional Magnet School, Freedom Park Elementary School, Goshen Elementary School, Tutt Middle School, and A. Brian Merry Elementary School. Schools in Aiken County that have participated in the program include Aiken Middle School and North Aiken Elementary School. Both GDOT and SCDOT offer Safe Routes to School Resource Centers to specific regions throughout the two states. Columbia and Richmond County are within the Georgia Coastal Region and Aiken is within the South Carolina Midlands Region.



An excerpt from the Georgia Safe Routes to School (SRTS) Planning Guide and Workbook. This graphic outlines the different levels of partnership in the SRTS program. (http://www.saferoutesga.org)

SAFE KIDS PROGRAMS

The Safe Kids East Central program serves Richmond and Columbia counties for the purpose of preventing childhood accidents. Safe Kids Aiken serves the Aiken County community. The program also promotes legislation geared at child safety, and provides varying information and classes on safety, including the distribution of safety equipment such as bike helmets at little or no cost.

AUGUSTA'S GEORGIA BIKES! PROGRAM

A Georgia Bikes! Grant Program was recently initiated by the Governor's Office of Highway Safety (GOHS) to help reduce bicycle crashes in the state. Georgia Bikes! is a support group to help improve bicycling conditions and promote safe bicycling throughout the state. The program provides a mechanism for local advocacy groups to provide community driven safety education and advocacy programs. The Wheel Movement in Augusta (Richmond County) was one of five areas in the state to receive the first round of these grants. Members of Wheel Movement plan to use their grant award to produce safe riding clinics, develop a safe road initiative media campaign, host law enforcement education seminars, and set up bicycle safety classes for kids.

EAT SMART MOVE MORE AIKEN

Eat Smart Move More South Carolina (ESMM SC) is a statewide coalition that offers resources about healthy lifestyles and advocacy for active living to local groups. In particular, the "Options for Action" toolkit offered by the organization is a best practices guide for community campaigns that promote bicycling, walking, and access to healthy foods. Aiken County is currently developing a local chapter ESMM SC.

Other Existing and Potential Partners

Local non-profit organizations, coalitions, and major institutions should play a leading role in developing, implementing and sponsoring bicycling and walking programs. The ARTS region already has a network of entities that could partner with local governments to generate community awareness and

broad participation in bicycling and walking programs.

Aiken Bicycle Club
Aiken Medical Center
Aiken Running Club
Aiken Sidewalk Appreciation Society
Augusta BMX
Augusta Cross Coalition
Augusta Freewheelers
Augusta Road Cyclists
Augusta Sports Council
Augusta Striders
Augusta Wheel Movement
Augusta Greenway Alliance
Augusta Striders
Central Savannah River Area (CSRA)
Fort Gordon
Healthy Augusta
Local bicycle shops
Local active-wear and outfitter retailers
North Atalnta Riding Club
SORBA CSRA (Local Chapter of the Southern Off-Road Bicycle Association)
Tri Augusta
University Health Care System
Universities and colleges within the ARTS region
YMCAs

Program Recommendations

Encouragement

SAFE ROUTES TO SCHOOL

As referenced earlier, a number of schools within the region have already participated in a Safe Routes to School Program. A major next step in developing a regional approach to this program is to develop a regional Safe Routes to School Plan and set a benchmark that all elementary schools within the region take part in the program over a specified period of time. Communities should contact their regional Safe Routes to School Coordinators to leverage resources as they develop plans for implementation of this program. This coordination would assist the Regional Bicycle and Pedestrian Committee in forming a list of all elementary schools in the region and in determining priorities and funding partnerships for the regional program.

Program Resources:

National Safe Routes to School Partnership: http://www.saferoutespartnership.org/

National Center for Safe Routes to School: http://www.saferoutesinfo.org/

SC Safe Routes to School Resource Center: http://scsaferoutes.org/

GA Safe Routes to School Resource Center: http://www.saferoutesga.org/

Sample Safe Routes to School Encouragement Program (SC): http://active-living.org/Walking--Wheeling-Wednesday.html

Sample Safe Routes to School Travel Plans (GA): http://www.saferoutesga.org/content/completed-travel-plans

CAR-FREE STREET EVENTS

Car-free street events have many names: Sunday Parkways, Ciclovias, Summer Streets, and Sunday Streets. The events are periodic street "openings" (i.e., "open" to users besides just cars; usually on Sundays) that create a temporary park that is open to the public for walking, bicycling, dancing, hula hooping, roller-skating, etc. They have been very successful internationally and are rapidly becoming popular in the United States. Car-free street events promote health by creating a safe and attractive space for physical activity and social contact, and are cost-effective compared to the cost of building new parks for the same purpose. Events can be weekly events or one-time occasions, and are generally very popular and well attended.

This Plan recommends that the municipalities of ARTS consider hosting car-free street events annually. Smaller communities may choose a two-block section of street, while larger population centers may choose a longer corridor.

Program Resources:
Atlanta Streets Alive: http://www.atlantabike.org/atlantastreetsalive

Vancouver LiveStreets: http://www.livestreets.ca/

San Francisco Sunday Streets: http://sundaystreetssf.com/

Oakland's Oaklavia http://oaklavia.org/media

Portland Sunday Parkways: http://portlandsundayparkways.org/

WEEKEND WALKABOUTS

Weekend Walkabouts are regularly occurring events that promote walking while also bringing attention to pedestrian infrastructure. Weekend Walkabouts can be held either monthly from May to October or quarterly to include one walk per season, depending on staff availability and marketing opportunities. The events' walking routes should highlight safe and inviting places to walk in the public realm (rather than private or enclosed facilities such as cemeteries or walking tracks) and should be 3 miles or less in length. These events are ideal for families and seniors.

Weekend Walkabouts may be organized based on themes for each walk, such as an architectural tour, a "Steeple Chase" tour (visiting historic churches), a tour of parks, neighborhood strolls, etc. To generate added marketing potential, community leaders or local celebrities could be chosen to lead each walk. For each event, at least one volunteer or staff member should be positioned at both the front and the rear of the walking group. The pace should remain at 2-2.5 miles per hour or less. A refreshment break with water should be offered at the halfway point for any walk of 2 or more miles.

In the spring, a Weekend Walkabout may be planned in conjunction with the annual event known as "Jane's Walk." Inspired by the "people's planner" Jane Jacobs, Jane's Walk occurs on May 1st and involves free neighborhood walking tours, developed and delivered by citizens, as a way to help put people in touch with their environment and with each other.

Program Resources:
Spartanburg, SC Weekend Walkabouts: http://active-living.org/Walkabouts-and-Rideabouts-3.html

Jane's Walk: www.janeswalk.net

BIKE MONTH ACTIVITIES

Cities and towns across the country participate in National Bike Month annually, during May. The League of American Bicyclists (LAB) hosts a website for event organizers. The website

Inspired by the "people's planner" Jane Jacobs, Jane's Walk occurs on May 1st and involves free neighborhood walking tours, developed and delivered by citizens, as a way to help put people in touch with their environment and with each other. (www.janeswalk,net)

contains information on nationwide and local events, an organizing handbook, and promotional materials.

It is recommended that ARTS counties and municipalities host National Bike Month events and activities annually, with the support of local bicycling groups and shops. Bike Month activities may include:

- Bike to Work Day events: morning-commute energizer stations with food, encouragement, information, and sponsored goodies for participants; rally or celebration with raffles, food, and vendors.
- Group rides to the business center with the mayor and/or local celebrities.
- Discounts at local businesses for bicycle commuters.
- Bike vs. Bus vs. Car challenge. This is a fun competition to determine which transportation mode arrives at the city center in the least amount of time.
- Short, themed community bicycle rides, such as an art tour or restaurant tour.
- Participation in the national Ride of Silence bike ride to bring awareness to cyclist safety
- Mountain biking skills clinic and tour of mountain biking trails
- Bicycle parking valet, hosted by volunteers, to offer free bicycle parking at special events
- Bicycle Commuter Course taught by nationally certified League Cycling Instructors
- A contest for artists to create public art pieces using bicycle materials

Program Resources:
National Bike Month: http://www.bikeleague.org/programs/bikemonth/

Greenville, SC Bike Month events: http://www.greenvillesc.gov/ParksRec/trails/bikemonth.aspx

Atlanta, GA Bike Month events: http://www.atlantabike.org/May

Education and Enforcement

As noted in the review of existing safety programs, there are a number of opportunities to enhance programs already enacted in the region utilizing available statewide resources. The following recommendations are proposed for the region:

SAFE STREETS SAVE LIVES REGIONAL PROGRAM

The Safe Streets Save Lives Campaign of the Palmetto Cycling Coalition in South Carolina is intended to advance safe practices of both bicyclists and motorists within the state. Using this resource, Aiken County has already conducted some community outreach at a local community center. It is recommended that a regional campaign be developed with assistance from representatives at the Palmetto Cycling Coalition to advance this effort throughout the South Carolina portion of the region.

Program Resource:
Safe Streets Save Lives Program: http://www.safestreetssavelives.org/

safe streets save lives.org
let's get there together

ISSUE FOCUSED SAFETY CAMPAIGN: NIGHTTIME CRASHES

The crash analysis conducted as part of Chapter 3 of this Plan revealed that approximately 50 percent of pedestrian crashes in Aiken County are occurring in dark conditions and 40 percent of all pedestrian crashes in Richmond are occurring during non-daylight hours. These night-time crashes are

also a major factor in the reported pedestrian fatalities. A focused safety campaign, with active media outreach to providing bike lights and educate citizens on clothing and other safety issues during these times of day is recommended to address this crash analysis finding. A benchmark to reduce night-time crash rates could be set to provide an evaluation measure for how well this safety program works in reducing these crashes. Coordination with local advocacy groups and retailers is recommended in the implementation of this safety program and others that may become relevant over time.

Program Resource:
Greenville, SC Lights for Life: http://bikegreenville.blogspot.com/2011/10/lights-for-life.html

POLICE TRAINING PROGRAMS

Police training courses provide police officers with safety education related to the rights and responsibilities of bicyclists, pedestrians, and motorists. These educational courses may be provided in coordination with Palmetto Cycling Coalition, Georgia Bikes!, and other regional programs. The training will explain such matters as: common errors in reporting a bicycle or pedestrian collision; laws related to pedestrian crossings in and out of crosswalks; laws related to a motorist passing a bicyclist; etc. A regional benchmark could be set to provide bicycle and pedestrian training programs for all police officers within the region by 2014.

Program Resource:
Bike Law: http://www.bikelaw.com/

PROFESSIONAL DRIVER TRAINING

Driver training programs are currently offered for employees of Augusta-Richmond County, Columbia County, and the City of Aiken. ARTS should coordinate with each agency offering the driver training courses to ensure that the courses offer up-to-date and practical information about sharing the road with bicyclists. Additionally, ARTS should provide incentives for the agencies to expand their driver training programs to include other commercial drivers in the region, such transit drivers, school bus drivers, and taxi drivers.

The Cities of Aiken and Augusta currently have a number of police officers serving the downtown area on bicycles.

Program Resource:
San Francisco Bicycle Coalition Driver Education: http://www.sfbike.org/?drivertraining

Evaluation

REGIONAL BICYCLE AND PEDESTRIAN COMMITTEE

An advisory committee has already been successfully used to develop an updated bicycle and pedestrian plan for the region and it is recommended that a permanent committee comprised of government staff and local advocacy groups be instituted to oversee bicycle safety programs at a regional level. This will allow a forum for regional interests to coordinate and share successes and lessons learned. Information on actions of this committee and educational materials should be made available through a regional website to make the program visible and transparent to the public. This website may also provide

a centralized location for tracking safety awareness and other bicycling and walking events in the area and overall progress towards plan implementation and achievement of goals for bicycling and walking.

Program Resources:
Roanoke Valley Alleghany Regional Commission: http://www.rvarc.org/bike/home.htm

Capitol Region Council of Governments: http://www.crcog.org/Meetings_minutes/mm_bicycle_committee.html

Southwestern Pennsylvania Commission: http://www.spcregion.org/trans_pedbike.shtml

REGIONAL PLAN FOR BICYCLE AND PEDESTRIAN COLLISION REDUCTION

Based on the findings of the safety analysis provided in Chapter 4 of this Plan, ARTS should develop a regional plan to reduce bicycle and pedestrian crashes and fatalities. The Regional Bicycle and Pedestrian Committee (recommended earlier in this chapter) should facilitate the process of developing the plan. The plan should complement the existing Strategic Highway Safety Plans for GA and SC and should be developed in partnership with SCDOT, GDOT, the SC Department of Public Safety Office of Highway Safety, the Georgia Governor's Office of Highway Safety, and local public safety or police departments. Every other year, these partners should complete an analysis of bicycle and pedestrian collision data and reconvene to update the plan.

Program Resources:
GA Strategic Highway Safety Plan: http://www.gahighwaysafety.org/shsp/

SC Strategic Highway Safety Plan: http://www.scdot.org/inside/multimodal/pdfs/road_map.pdf

DEDICATED FUNDING SOURCE

Nationally, bicycle and pedestrian travel account for 13 percent of all traffic fatalities. In Georgia, it is 10.1 percent and in South Carolina it is 12 percent. Yet, these travel modes account for only 0.6 percent of Federal Safety funds nationally, and only 0.5 percent and 0.0 percent of Georgia and South Carolina's Federal Safety funds, respectively.

Public funding for biking and walking facilities is a crucial component of local policy. ARTS should consider a funding program to increase the portion of funds available for bicycle and pedestrian infrastructure. As an example, Nashville, Tennessee (population 605,473) recently established a model program for determining local funding allotments. By virtue of a policy established by the MPO Executive Board, 15 percent of Surface Transportation Program (STP) funds are set aside annually for active transportation projects. For the current funding cycle (2011 to 2015), that amounts to roughly $2.5 million that will be used exclusively for bicycle and pedestrian infrastructure and education costs. That figure does not reflect additional funds allotted for bicycle and pedestrian facilities that are incorporated into other, larger projects (such as a road widening project that may include a sidewalk and bike lane).

Program Resource:
Nashville Area Metropolitan Planning Organization, 2035 Regional Transportation Plan: Urban Surface Transportation Program Investment Strategy: http://www.nashvillempo.org/plans_programs/rtp/2035_rtp.aspx

Evaluation programs allow communities to effectively measure the impact that their facility, policy, and program improvements are having on the community and gauge where additional measures may be needed.

ANNUAL COUNT PROGRAM

Evaluation programs measure and evaluate the impact of projects, policies and programs. Typical evaluation programs range from a simple year over year comparison of US Census Journey to Work data to bicycle and pedestrian counts and community surveys. Counts and community surveys act as methods to evaluate not only the impacts of specific bicycle and pedestrian improvement projects but can also function as way to measure progress towards reaching local goals such as increased bicycle and pedestrian travel for trips one mile or less. Through development of the Regional Bicycle and Pedestrian Plan Update, ARTS has already established baseline data and a tested methodology for collecting annual counts.

This Plan recommends, at minimum:

- Before and after bicycle, pedestrian and motor vehicle counts on all major roadway, bikeway, or pedestrian infrastructure projects.
- Annual bicycle and pedestrian counts conducted at minimum at the 23 locations counted as part of this regional planning effort. (More count locations, especially in Richmond County, would be worthwhile.)
- Annual analysis of the collected bicycle and pedestrian data.

Program Resource:
National Bicycle and Pedestrian Documentation Project: http://bikepeddocumentation.org/

Facilities Inventory

The existing conditions report in Chapter 3 of this Plan identified a lack of comprehensive inventories of sidewalk facilities and bicycle support facilities. A lack of comprehensive sidewalk data impairs a community's ability to effectively assess pedestrian facility needs and prioritize funding for sidewalk construction and repair. Columbia County has begun the process of addressing this issue by developing a County-wide sidewalk inventory.

The process of completing the Bicycle Friendly Community application for three ARTS communities (see Chapter 3, Section 3) revealed a lack of data related to existing bicycle parking. An inventory of bicycle parking and other bicycle support facilities is not only important for achieving Bicycle Friendly Community status, by also for providing information to the public about the location of bicycling parking amenities and for identifying locations in need of parking amenities.

This Plan recommends that, at a minimum, in coordination with ARTS:

- Augusta-Richmond and Aiken counties develop sidewalk and bicycle parking inventory programs
- Columbia County continue to develop its existing sidewalk inventory program and establish a bicycle parking inventory program
- All counties establish internal processes to update the inventories on an ongoing basis

Policy Recommendations

Policy recommendations of the ARTS Bicycle and Pedestrian Plan are based on a review and assessment of development requirements related to bicycle and pedestrian facilities for five jurisdictions within the ARTS study area. The full policy review is provided in Appendix B. The list of jurisdictions evaluated includes Augusta/Richmond County (GA), Columbia County (GA), City of North Augusta (SC), City of Aiken (SC), and Aiken County (SC). Each of these communities is a member of the ARTS community and representative of the "state of the practice" within the ARTS jurisdiction. As shown in Appendix B, the review is not limited to the land development ordinances of each jurisdiction; some of these jurisdictions also have design guidelines associated with streets and the recently completed North Augusta Greeneway, Pedestrian, and Bicycle Master Plan was reviewed, as well.

In evaluating the existing policies, it is evident that ARTS could provide guidance and direction to its member municipalities to significantly strengthen many areas regarding complete streets, bicycle, and pedestrian facility requirements and enhancements within the context of their development ordinances. Additional guidance geared toward retrofit of existing facilities is also recommended. The

following provides recommended "next steps" for improving the bicycle- and walk-friendliness of local policies.

Complete Streets Policy

A Complete Street is a roadway that, in addition to general purpose vehicular travel lanes, includes items such as sidewalks, bike lanes or shoulders, bus lanes, transit stops, crosswalks, median refuges, curb bulbouts, appropriate landscaping, and other features that add to the usability and livability of the street as determined by context. As of October, 2011, legislation on the subject has been passed in 25 states and almost 300 other jurisdictions throughout the country, and the Safe and Complete Streets Act of 2011 is currently pending in Congress.

This Plan recommends that ARTS and each jurisdiction within ARTS adopt a Complete Street Policy.

It is anticipated that at a national level when the surface transportation bill is reauthorized, projects receiving federal funding will need to demonstrate some level of Complete Streets compliance. SCDOT was one of the first states to adopt a Complete Streets Policy in 2002, but has been lacking in taking the next step in revising state roadway design guidelines to accommodate and implement Complete Streets on a statewide level. For this reason, it is imperative that each municipality not only develop and adopt a Policy, but also review and revise current design guidelines to effectively implement Compete Streets in each community. In addition to ARTS adopting its own overarching Complete Streets Policy, each community should adopt a similarly-worded Policy, then also adopt street design guidelines as provided in Appendix E of this Plan. ARTS can facilitate the tailoring and adoption of those guidelines for each member jurisdiction, and in this way can maintain consistency across the region consistent with the goals and tenets of this planning effort.

To aid in policy development and provide consistency across the region, ARTS should provide sample language for a Complete Streets Policy to its member jurisdictions. According to the National Complete Streets Coalition (www.completestreets.org), an ideal Policy should include the following elements:

- Includes a vision for how and why the community wants to complete its streets
- Specifies that 'all users' includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles.
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way.
- Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions.
- Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes.
- Is adoptable by all agencies to cover all roads.
- Directs the use of the latest and best design criteria and guidelines while recognizing the need for flexibility in balancing user needs.
- Directs that complete streets solutions will complement the context of the community.

ARTS can use the resources associated with the National Complete Streets Coalition (they have sample policies from around the country to draw upon) to develop and tailor a Policy consistent with the area's context and goals. The Policy itself need not be cumbersome in its language; however, the real "teeth" associated with the Policy is the subsequent development of Design Guidelines such as typical cross sections that can be applied in varied contexts throughout each of the member jurisdictions, as articulated in the next recommendation.

As a complement to a Complete Streets Policy, ARTS should work with its member communities in expanding their respective palettes of street sections to incorporate a more context-based approach similar to other progressive communities. These cross-sections should be represented graphically as well as in table form, to clearly depict ideal street sections while giving flexibility in retrofit situations. North Augusta implies inclusion of Complete Streets principles in roadway design, but falls short in actual availability of design guidelines incorporating those principles. The new ARTS Bicycle Plan includes a number of street cross-sections that accommodate multimodal users in rural to urban contexts occurring throughout

member communities. It is recommended that each municipality adopt the design guidelines provided by ARTS to encourage regional consistency and predictability in application. ARTS should also facilitate discussions with SCDOT and GDOT to help reconcile the historical disconnect between state and local roads.

Development Ordinances

ARTS should also direct member jurisdictions to consider revisions to their development ordinances to include more pedestrian-friendly automobile parking ratios and layout guidance, bicycle parking, and amenities geared toward increasing non-motorized utilization for commuters. In order to promote a vibrant pedestrian-oriented environment, it is important that strict policies and guidelines are put into place to limit the physical and visual impact of automobiles in a place. Limiting automobile parking quantity and requiring that parking lots and garages are somewhat hidden and do not form part of the "street wall" immediately adjacent to sidewalks are items that should be explicitly addressed within design regulations.

Block Size and Street Connectivity

ARTS should direct member jurisdictions to consider revisions to their development ordinances to include requirements for block size and street connectivity (both motorized and non-motorized) which facilitates multimodal travel choice. Block size regulations should include a provision stipulating that pedestrian facilities including sidewalks, paths, and accessways are spaced no more than 400 feet apart. Ideally, streets and intersections supporting vehicular movement would have the same resolution, but a maximum block length of 600-800 feet (with bisecting pedestrian facilities) would still provide a high level of accessibility for all travel modes. Dead-end streets should be discouraged to the greatest extent possible (North Augusta has good code language with regards to this), with allowable lengths specified as no more than 300 feet. Maximum connectivity indexes for areas of any size can be specified and calculated using a link-node ratio such that given in the most recent LEED-ND guidelines; indexes can be used in addition to or in lieu of the block length specifications proposed above to provide a desired level of walkability.

Member communities could use a combination of incentives and disincentives to encourage compliance.

Sidewalk Ordinance

The existing conditions report in Chapter 3 of this Plan identified not only a need for closing existing gaps within the sidewalk network, but also for establishing policies that prevent the creation of sidewalk gaps through the development process. This Plan recommends that Aiken, Augusta-Richmond, and Columbia Counties each develop policy language recommending that new developments be conditioned to include sidewalks.

Policy Development

Columbia County is already in the process of developing language that recommends complete streets elements (such as traffic calming), which improve the pedestrian environment, and is additionally, developing a comprehensive sidewalk inventory. Building from those efforts, the following provides a framework for policy language related to sidewalk requirements:

Whereas,

- the Public Works Department is routinely incorporating sidewalks into roadway expansion projects;
- new development within the County routinely does not include sidewalks;
- the Public Works Department routinely receives public requests for sidewalks that cannot be supported through existing County resources;
- sidewalks are positively correlated to improved walkability and increased real estate values;[1]

Therefore, resolve to adopt a policy recommending code revision to require sidewalks on particular

- street types,
- land uses
- or densities.

1 Refer to Chapter 1 of this Plan for research related to the correlation between economic vitality and walkability, as well as the following reports:

- Active Living Research: http://www.activelivingresearch.org/files/Synthesis_Shoup-Ewing_March2010.pdf;

- CEOs for Cities: http://www.ceosforcities.org/pagefiles/WalkingtheWalk_Summary.pdf;

- Commission for Architecture and the Built Environment (CABE): http://webarchive.nationalarchives.gov.uk/20110118095356/http:/www.cabe.org.uk/files/paved-with-gold-summary.pdf

Table 6-1: Mt. Pleasant Pedestrian Minumum Access Standards

Land Use/Road Classification	Minimum Requirement
Commercial and industrial (new streets)	Sidewalk both sides
Commercial and industrial (new development on existing street)	Sidewalk one side if specified on Road Improvement/Transportation Plan
Major arterial	Sidewalk both sides
Residential collector (including boulevards, parkways, and spine roads)	Sidewalk one side on streets having direct access to lots
	Pedestrian path/bikeway on one side may be direct access to lots with Planning Commission approval
Local residential streets	
-Greater than 3.5 units per acre	Sidewalk both sides
-Between 3.5 and 1.1 units per acre	Sidewalk one side
-Less than or equal to 1.0 units per acre	Pedestrian path/bikeway
-Between neighborhoods, commercial developments, schools, parks, community areas and the like	Whenever possible, a pedestrian access path, bike trail, or crosswalk shall be provided between existing and proposed new subdivisions and other pedestrian- oriented destinations

Recognizing the unique characteristics of the ARTS region, this Plan recommends aligning sidewalk requirements with a combination of street type and land use, rather than densities. Examples can be found in nearby Dekalb County, GA, and the City of Mount Pleasant, SC., as cited below:

Dekalb County Code of Ordinances sec. 14-383 (Streets)

> (a) Sidewalks shall be required on all sides of street frontage on all new and improved local residential streets in all subdivisions and along the street frontage of all new and improved non-residential developments and as set forth in section 14-190 of this article, unless determined by the planning commission to be infeasible only due to severe cross-slopes, shallow rock, soil or topographic conditions. At a minimum, however, continuous sidewalks shall be required on at least one (1) side of all new and improved local residential streets in all new and improved. No other variances or exceptions are allowed.
>
> (b) The development director or planning commission may require that sidewalks required pursuant to 14-383(a) be continued to the nearest major or minor arterial or collector street.

Mt. Pleasant, South Carolina Code of Ordinances sec. 156-108 (Curb Cuts and Pedestrian Access)

> (1) New developments, subdivisions, and remodeling. Appropriate pedestrian access shall be provided for all new developments, subdivisions, and renovation or remodeling equaling 50% of the existing building's value, either through the construction of concrete sidewalks or pedestrian path/ bikeway systems, or a combination of both.
>
> (2) Table of pedestrian access requirements. Requirements for pedestrian access shall be in accordance with the provisions as shown in Table 6-1

Policy Enforcement

In implementation of sidewalk requirements, it is important to note that Columbia County currently experiences discrepancies between approved plat designs and the construction that follows. Plats adopted with sidewalks are, at times, not constructed per the approved plan. The issue is not unique to Columbia County and is relatively common among local municipalities, particularly those experiencing rapid growth and development. This Plan recommends that the counties of ARTS:

- Use land development tracking software to flag parcels that are planned to include a sidewalk, bike lane or other traffic calming improvements;
- Consider rejecting or not approving

Table 6-2: Criteria for short-term and long-term bicycle parking[2]

Criteria	Short-term	Long-term
Parking Duration	Less than two hours	More than two hours
Fixture Type	Simple bicycle racks	Lockers, racks in secured area
Weather Protection	Unsheltered	Sheltered or enclosed
		Secured, active surveillance
Security	Unsecured, passive surveillance	Unsupervised
		"Individual-secure" such as bicycle lockers
		"Shared-secure" such as bicycle room or cage
		Supervised
		Valet bicycle parking
		Paid area of transit station
Typical land uses	Commercial or retail, medical/ healthcare, parks and recreation areas, community centers	Residential, workplace, transit

2 Association of Pedestrian and Bicycle Professionals (APBP) Bicycle Parking Guide, 2010. Page 10.

construction plan sets that omit said improvements to assist in successful inspection of these requirements.

Bicycle Parking Ordinance

At present, bicycle parking within the ARTS region is extremely limited and member jurisdictions of ARTS do not have codified bicycle parking requirements. To expand bike parking in the region, each city should adopt general bicycle requirements that extend to all land uses. The expansion of bicycle parking will enable more trips to be made by bicycle.

Just as car trips vary in purpose and duration, so too do bicycle trips. Because of the varied nature of bicycle trips, different types of bicycle parking should be provided to accommodate

these needs. These needs can be met by providing both short-term and long-term parking. The Association of Pedestrian and Bicycle Professionals addresses the distinction between Short/Long-Term parking in the Bicycle Parking Guide, 2nd Edition, 2010) (Table 6-2).

Providing the options for short-term and long-term bicycle parking is important to bicyclists. Table 4 lists typical bicycle parking recommendations based on land use categories. The figures are derived from the APBP Bicycle Parking Guide, 2nd Edition and other best practices from around the country.

Refer to the Design Guidelines of this Plan, found in Appendix E, for additional guidance related to bicycle parking design, installation, and location.

Unit of Measurement

Communities use different metrics for assigning appropriate levels of bicycle parking, including:

- Unit count
- Percentage of building square footage
- Building occupancy
- Percentage car parking

The new APBP Guidelines recommend decoupling bike parking supply from car parking supply. The reason for this is that a percentage of car parking supply is not necessarily a good measure of the number of cyclists who would be expected to travel to a particular destination, especially in densely urbanized areas or where multiple travel options exist. We recommend a land use-based approach with location-specific measures of supply such as parking spaces per square footage of retail or percentage of transit boardings. The APBP Bicycle Parking Guide provides two groups of recommendations, one standard set and a higher level for "Urbanized or High Mode Share Areas." Because of the characteristics of the ARTS region, Table 6-3 does not reflect the higher bicycle parking rates from the Bicycle Parking Guide.

In-Lieu of Parking

Cities or Counties within ARTS that enforce short and long-term bicycle parking requirements as outlined in Table 4: Bike Parking Recommendations by Use may also choose to offer an "In-lieu of Parking" program. These programs allow property owners to pay fees to a general City or County Fund established for the development of bicycle support facilities, instead of installing bike parking on their facility. The money collected in this fund can then be used for the development of bicycle facilities elsewhere in the community.

Funding Assistance

ARTS can provide guidance to its member communities as to funding avenues on both the Federal and State level to facilitate retrofits of existing facilities to realize Complete Streets throughout the ARTS area. Appendix F is a comprehensive listing of Federal funding opportunities currently available for Complete Streets implementation.

Table 6-3: Typical Bike Parking Recommendations by Use

Use	Short-Term Bicycle Parking	Long-Term Bicycle Parking
Recreational/Civic		
Non-assembly cultural (library, government buildings, etc.)	1 sp./10K sq. ft. (2 min)	1 sp./10 employees (2 min)
Assembly cultural (church, theater, park, etc.)	Spaces for 2% maximum daily attendance	1 sp./20 employees (2 min)
Hospital	1 sp./20K sq. ft., (2 min.)	1 sp./20 employees or 1 sp./70K sq. ft., whichever is greater (2 min.)
Schools		
Kindergarten/Elementary Schools	1 sp./20 students (2 min)	1 sp./10 employees (2 min)
Jr. High/High School	1 sp./20 students (2 min)	1 sp./10 employees + 1 sp./20 students (2 min)
Colleges/Universities	1 sp./10 students (2 min)	1 sp./10 employees + 1 sp./10 students; or 1 sp./20K sq. ft., whichever is greater
Residential		
Single Family	No spaces required	No spaces required
Multifamily Residential		
With private garage for each unit	.05 sp./bedroom (2 min)	No spaces required
Without private garage for each unit	.05 sp./bedroom (2 min.)	.5 sp./bedroom (2 min)
Senior Housing	.05 sp./bedroom (2 min.)	.5 sp./bedroom (2 min)
Commercial/Other	1 sp./5K sq. ft.	1 sp./12K sq. ft.
Offices	1 sp./20K sq. ft. (2 min)	1 sp./10K sq. ft. (2 min)
Retail (furniture, appliances, hardware, etc.)	1 sp./5K sq. ft. (2 min)	1 sp./12K sq. ft. (2 min)
Retail (grocery, convenience, personal)	1 sp./2K sq. ft. (2 min)	1 sp./12K sq. ft. (2 min.)
Industrial/Manufacturing	Determined at discretion of Planning Director (Suggested 2 min)	1 sp./15K sq. ft. (2 min)
Bus terminals/stations	Spaces for 1.5% of a.m. peak period ridership	Spaces for 5% projected a.m. peak period daily ridership