

# PROGRAMS AND POLICIES

## Chapter 4

### 4.1 Overview

**T**his chapter presents local measures to increase walking and to promote pedestrian safety. It provides a vision and policy framework for pedestrian travel, clarifying the City of Graham's role in addressing pedestrian issues and meeting pedestrians' needs. Actions and policy recommendations are listed for better integrating pedestrian travel into the transportation system. Education, encouragement, and enforcement strategies are also discussed to address the users of Graham's pedestrian network.

An emphasis on pedestrian considerations parallels new policies within the region and state. The North Carolina Department of Transportation's (NCDOT)'s *Board of Transportation Resolution* (2000) explains that "bicycling and walking accommodations shall be a routine part of the North Carolina Department of Transportation's planning, design, construction, and operations activities" and that "bicycling and walking [is] a critical part of the state's transportation activities."<sup>1</sup>

Previous local planning efforts have outlined pedestrian goals and needs for Graham. The following programs, policies, and action items, described in sections 4.2 - 4.4, were prepared in consultation with the following plans and documentation: *The City of Graham Growth Management Plan 2000-2020*, *The City of Graham Development Ordinances*, *The Comprehensive Master Plan – Recreation and Parks Services*, and the *Burlington Graham Urban Area Metropolitan Planning Organization (BGMPO) Transportation Plan Update 2005-2030*. Documents that are available online are listed below with their weblinks. The Pedestrian Steering Committee also contributed with their visions and ideas, which included education/encouragement/enforcement programs, connectivity, safety, and community strengthening. Policies relating to implementation are listed in Chapter 5 – Implementation.

City of Graham Growth Management Plan 2000-2020

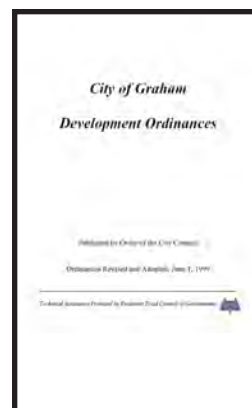
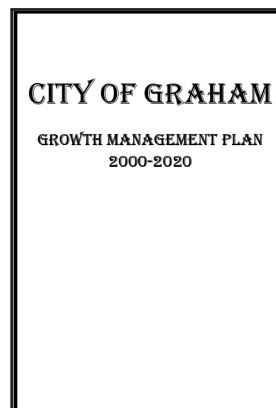
<http://www.cityofgraham.com/growth%20mgnt%20plan.htm>

City of Graham Development Ordinances

[http://cityofgraham.com/Development\\_Ordinance.pdf](http://cityofgraham.com/Development_Ordinance.pdf)

Burlington Graham Urban Area Metropolitan Planning Organization (BGMPO) Transportation Plan Update 2005-2030

<http://www.mpo.burlington.nc.us/datanreports/main.htm>



## 4.2 Policy Recommendations

Policy recommendations were derived from local plans and ordinances (described briefly in Section 4.1), Pedestrian Steering Committee input, other City Pedestrian Plans, and community need. Several policy action items were derived or taken directly from the **Oakland, CA Pedestrian Master Plan**.

### 4.2.1 Access and Connectivity (AC)

*Develop a connected network of pedestrian corridors, both on-road and off-road, prioritizing routes to schools, Downtown, and other trip attractors, that enables pedestrians to travel safely and freely.*

#### General Plan Policies (from local plans and ordinances)

“The developer shall install sidewalks on one side of a new street at the back of the right-of-way with a grass planting between the curb and the sidewalk. Installation of sidewalks is not required for existing streets.” (*City of Graham Development Ordinances, Section 10.343*)

“Promote a greenway system that links together the City’s recreational resources.” (*The City of Graham Growth Management Plan 2000-2020, p. 36*)

“The subdivider shall provide a 50 foot natural, undisturbed buffer along both sides of all perennial and intermittent streams shown on USGS maps. The City shall enforce protection of these buffers in an undisturbed state. Public greenway trails with limited disturbance along perennial and intermittent streams may be accepted with the approval by the City Council.” (*City of Graham Development Ordinances, Section 10.341*).

“Open space is an essential component of any well designed planned unit development. Open spaces provide areas for active and passive recreation immediately adjacent to dwelling units.....Each residential planned unit development (or residential portion of a mixed use planned unit development) shall provide common open space as a percentage of the entire parcel.....” (*City of Graham Development Ordinances, Section 10.168*).

“Expand the greenway system along rivers, creeks, and tributaries to encourage open space preservation, floodplain protection, and offer residents additional areas for recreational activities.” (*The City of Graham Growth Management Plan 2000-2020 p. 53*)

“Greenways – Areas designed to provide public access along waterways and scenic corridors. These areas offer recreational opportunities as well as environmental. The development of natural greenways along waterways help to provide a riparian buffer that will reduce urban runoff into creeks, streams and rivers. Greenways are usually found along waterways within the floodplain, where no development is allowed to occur. The key design issue is to preserve as much of the natural environment as possible.” (*The City of Graham Growth Management Plan 2000-2020 p. 47*)



“The currently undeveloped area of South Graham Park is completely bordered by the Little Alamance Creek....this natural area of the park can become the termination point for a network of greenway trails leading over from the Haw River and the Mountains-to-the-Sea Trail.” (*The Comprehensive Master Plan – Recreation and Parks Services*, p. 25-26)

“Because of the river, creeks, and tributaries previously mentioned, the City has an opportunity to create a series of greenway trails that eventually can be linked together to form a network of trails. The recommendation in this plan for a section of the Haw River is to create a canoe trail on the river itself and a hiking trail along the banks of the river. This trail would be multi-purpose in that it would provide opportunities for mountain biking, nature walks, and hiking. This portion of the Haw River trail would coincide with the Mountains-to-the Sea Trail and be consistent with the efforts of several groups to establish a linear park along the full length of the Haw River from Forsyth County to the Jordan Lake.” (*The Comprehensive Master Plan – Recreation and Parks Services*, p. 35)

“There currently exists a sewer easement owned by the City of Burlington along the Little Alamance Creek and Great Alamance Creek that can be easily used for the development of a greenway trail....it is proposed that the City pursue the creation of a trail along this corridor, with access points into neighborhoods along the way. The South Graham Park would serve as a termination point for this potential greenway trail which would be approximately seven miles from the park to the proposed access point at Highway 54.” (*The Comprehensive Master Plan – Recreation and Parks Services*, p. 38)

“Other local governments and institutions such as the Town of Haw River and Alamance Community College, in addition to the City of Burlington and Alamance County are potential partners in developing a canoe/hiking trail along the Haw River.” (*The Comprehensive Master Plan – Recreation and Parks Services*, p. 21)

“As the City continues to grow it should implement a land dedication ordinance that requires land developers to dedicate a portion of a new subdivision, or a cash contribution in lieu of, to the City as park land...the Town of Cary is an example of a community who has been extremely successful in developing its parks and greenway system through the land dedication ordinance.” (*The Comprehensive Master Plan – Recreation and Parks Services*, p. 22)

“Goal – Promote development of an integrated bicycle and pedestrian network.” (*Burlington Graham Urban Area Metropolitan Planning Organization (BGMPO) Transportation Plan Update 2005-2030*, p. 8)

“Objective – Pursue funding for a coordinated and comprehensive network of sidewalk and bicycle routes throughout the Urban Area.” (*Burlington Graham Urban Area Metropolitan Planning Organization (BGMPO) Transportation Plan Update 2005-2030*, p. 8)



“Objective – Improve the transportation system with accommodations to bicycle and pedestrian access.” (*Burlington Graham Urban Area Metropolitan Planning Organization (BGMPO) Transportation Plan Update 2005-2030*, p. 8)

“Independent Projects: Updating the Bicycle and Pedestrian Facilities Inventory... Creating an Urban Area map of pedestrian facilities” (*Burlington Graham Urban Area Metropolitan Planning Organization (BGMPO) Transportation Plan Update 2005-2030*, p. 19)

### Policy Recommendations and Action Items

#### **Route Network**

*Create and maintain a pedestrian route network that provides direct connections between Downtown, trip attractors, and residential/commercial areas.*

*Action AC 1. Building on local ordinances, sidewalks should be provided on both sides of thoroughfares, collectors, and sub-collector streets. Residential streets can be examined on a case-by-case basis depending on local traffic and proximity to schools.*

*Action AC 2. Design pedestrian underpasses and improve existing pedestrian tunnels, overpasses, and underpasses to enhance connectivity.*

*Action AC 3. Develop a system of signage for pedestrian facilities and greenways.*

*Action AC 4. Create trails, identified in *The Comprehensive Master Plan – Recreation and Parks Services* that follow creeks, extend connectivity, and help promote the restoration of those creeks.*

*Action AC 5. Conduct a study to identify streets with underused travel lanes for potential traffic calming projects including restriping, lane reduction, and sidewalk widening.*

*Action AC 6. Maintain the existing walkways to ensure that they are safe and free of debris and vegetation.*

*Action AC 7. To the maximum extent possible, make walkways accessible to people with physical disabilities.*

*Action AC 8. In order to achieve north-south connectivity, pedestrian-safe grade-separated interstate crossings and signage should be considered.*

*Action AC 9. Coordinate efforts with surrounding municipalities and Alamance County to ensure regional pedestrian and trail connectivity. An important example is the MST (Mountains-to-Sea Trail) that will utilize the Haw River Greenway corridor.*

*Action AC 10. Require developers to provide alternative transportation connections between developments to provide connectivity.*

*Action AC 11. Ensure that as development occurs to the South and East, that greenways, sidewalks, and crosswalks are developed to provide safe connectivity to Downtown.*



Policies to provide sidewalks near schools will make for a safer environment. Graham High School is pictured above.

### Safe Routes to School

*Develop projects and programs to improve pedestrian connectivity to and safety around schools.*

*Action AC 12.* All roads surrounding schools should have sidewalks on both sides of the road with safe crosswalks.

*Action AC 13.* Using the Pedestrian Route Network as a base, work with schools to designate, improve, and publicize safe routes to school.

*Action AC 14.* Implement a seamless school safety program that coordinates adult crossing guards, student safety patrols, and parent volunteers to ensure that all schools have adequate traffic safety programs.

*Action AC 15.* Prioritize crossing and sidewalk improvements around schools. Incorporate crossing signals near schools.

*Action AC 16.* Work with schools having inadequate pick-up and drop-off facilities to develop compensatory programs.

*Action AC 17.* All new schools in Graham should consider vehicle pick-up and drop-off areas to accommodate child pedestrian safety.

### 4.2.2 Safety (S)

*Create a street environment that strives to provide safe conditions for pedestrians.*

#### General Plan Policies (from local plans and ordinances)

“The developer shall install sidewalks on one side of a new street at the back of the right-of-way with a grass planting between the curb and the sidewalk. Installation of sidewalks is not required for existing streets.” (*City of Graham Development Ordinances, Section 10.343*)

“Improve the walkability of the City...Adopt Sidewalk Plan to showcase where additional pedestrian walkways should be built in the future...Require new development to include sidewalks that are part of the adopted Sidewalk Plan...Promote development that utilizes pedestrian walkways to connect with adjacent land uses.” (*The City of Graham Growth Management Plan 2000-2020, p. 32-33*)

“The purpose and intent of a planned unit development is to promote innovative design that is accessible to pedestrians and encourages the use of alternative modes of transportation.” (*City of Graham Development Ordinances, Section 10.126*)

#### Policy Recommendations and Action Items

### Sidewalk Safety

*Strive to maintain a complete sidewalk network free of broken or missing sidewalks, curb cuts, or curb ramps.*

*Action S 1.* Provide minimum five foot sidewalk width when possible, especially around





schools, Downtown, commercial centers, senior centers, and other areas of high pedestrian activity. Where possible, wider sidewalks are desirable.

*Action S 2.* Conduct future surveys or updates of areas lacking sidewalks and estimate the cost and feasibility of filling sidewalk gaps in areas with pedestrian traffic.

*Action S 3.* Create a program to enforce the responsibility of adjacent property owners for the addition of sidewalks to close gaps and accompany new development.

*Action S 4.* Continue to budget funds for new construction and sidewalk improvements especially where sidewalk gaps exist.

*Action S 5.* Implement pedestrian scale lighting at regular intervals in areas of high pedestrian activity to promote pedestrian safety and discourage criminal activity.

*Action S 6.* Identify pedestrian facilities that are not ADA-compliant including missing, damaged, or non-compliant curb ramps, stairs, or sidewalk segments of inadequate width and create a plan for improving them.

*Action S 7.* Develop and expand the City's maintenance program of on-demand sidewalk repairs, debris removal, and trimming of encroaching vegetation.

### **Crossing Safety**

*Improve pedestrian crossings in areas of high pedestrian activity where safety is an issue.*

*Action S 8* Install marked crosswalks at all intersections.

*Action S 9.* Consider the full range of design elements – including bulbouts and refuge islands – to improve pedestrian safety.

*Action S 10.* Update crossing treatment policy guidelines for all types of crossings based on current federal research (FHWA 2002a, FHWA 2002b).

*Action S 11.* Use residential and business densities to establish lower speed limits in areas with a high level of pedestrian activity or a history of pedestrian/motor vehicle collisions.

*Action S 12.* Ensure that crosswalks are properly lit at night.

*Action S 13.* Analyze pedestrian/motor vehicle collisions to reduce the incidences of pedestrian/motor vehicle conflict.

*Action S 14.* Install detectable warning surfaces at sidewalk and street boundaries.

*Action S 15.* Enforce automobile speed limits and intersection behaviors.

### **Traffic Signals**

*Use traffic signals and their associated features to improve pedestrian safety at dangerous intersections.*

*Action S 16.* Install pedestrian crossing signals at all major intersections.

*Action S 17.* Seek additional funds to pay for the retrofitting of traffic signals with pedestrian signal heads and the maintenance costs that such additions may incur.

*Action S 18.* Review the signal-timing program to ensure that it incorporates the needs of pedestrians by providing adequate crossing times.

*Action S 19.* Seek funds to address the backlog of traffic signals with special attention to signals in front of schools, senior centers, and other high-pedestrian activity centers.

*Action S 20.* Consider installing audible pedestrian signals at all new and retrofitted traffic



signals, especially in Downtown area and near senior centers.

*Action S 21. Consider using crossing enhancement technologies like countdown pedestrian signals at the highest pedestrian volume locations, especially in the Downtown area.*

#### 4.2.3 Community Strengthening (CS)

*Provide pedestrian amenities, promote land uses to enhance these public spaces, and promote these features to make Graham a more desirable place to live and a stronger community.*

#### General Plan Policies (from local plans and ordinances)

“Increase regional awareness of downtown as a potential shopping and tourist destination... Develop ‘Historic Walk Guide’ to be available throughout the City.” (*The City of Graham Growth Management Plan 2000-2020* p. 32)

“Coordinate a historical element into the planned greenway and trail development along the Haw River.” (*The Comprehensive Master Plan – Recreation and Parks Services*, p. 40)

“Town Center...Design characteristics for future development should focus on the traditional, pedestrian oriented downtowns of the early 1900’s. Some specific attributes to be considered are sidewalks, street trees, storefronts, and complementary building styles.” (*The City of Graham Growth Management Plan 2000-2020*, p. 39)

“Village Center...The development should be designed with both the pedestrian and automobile in mind.” (*The City of Graham Growth Management Plan 2000-2020* p. 40)

“Neighborhood Center...Automobile and pedestrian connections should be provided to surrounding developments.” (*The City of Graham Growth Management Plan 2000-2020* p. 40)

“Regional Commercial Center should be designed with the pedestrian in mind and structures should be built to an appropriate scale...Connectivity to adjacent land uses should be encouraged for both pedestrian and automobile traffic.” (*The City of Graham Growth Management Plan 2000-2020* p. 41)

“Regional Employment Center...The development usually includes amenities for workers including trails, picnic areas and open space.” (*The City of Graham Growth Management Plan 2000-2020* p. 42)

“Neighborhood Residential...Design of these developments should emphasize smaller lots, building placement close to the street, interconnectivity between neighborhoods, sidewalks, and street trees. The goal of this district is to create a ‘sense of place’ and a pedestrian friendly atmosphere at a higher density.” (*The City of Graham Growth Management Plan 2000-2020* p. 43)



“Suburban Residential...Future developments should look to provide sidewalks and connectivity between adjacent properties.” (*The City of Graham Growth Management Plan 2000-2020* p. 43)

“Traditional Neighborhood Development (TND)...A key attribute of the TND is the focus on pedestrians and creating a community that accommodates the automobile as well as the pedestrian.” (*The City of Graham Growth Management Plan 2000-2020* p. 45)

Town Center, Village Center, Neighborhood Center, Highway Commercial, Regional Commercial Center, Regional Employment Center, Regional Industrial Center, Neighborhood Residential, Suburban Residential, Conservation Residential and Traditional Neighborhood Development are all required to contain sidewalks. (*The City of Graham Growth Management Plan 2000-2020* Chapter 7)

Town Center, Village Center, Neighborhood Center, Neighborhood Residential, Suburban Residential and Traditional Neighborhood Development are all required to be pedestrian oriented, while Highway Commercial, Regional Commercial Center, and Conservation Residential are left as optional. (*The City of Graham Growth Management Plan 2000-2020* Chapter 7)

“The developer shall install sidewalks.....with a grass planting between the curb and the sidewalk.” (City of Graham Development Ordinances, p. 8-8).

“Parked vehicles shall not block pedestrian walkways.” (2006 newly adopted *Driveways* section of *City of Graham Development Ordinances*).

### Policy Recommendations and Action Items

#### **Streetscaping and “Trailscaping”**

*Encourage the inclusion of art, historic, and nature elements along with street furniture, landscaping, and lighting in pedestrian improvement projects.*

*Action CS 1. Identify pedestrian routes in neighborhood commercial districts and in the downtown to prioritize streetscaping improvements.*

*Action CS 2. Require street trees and planting buffers between the sidewalk and the street along all new roadways and sidewalk construction. Keep all vegetation trimmed.*

*Action CS 3. Prioritize the replacement of dead or missing trees.*

*Action CS 4. Include pedestrian-scale lighting in streetscaping projects.*

*Action CS 5. Consider incorporating local artwork into the Pedestrian Route Network, especially along greenways.*

*Action CS 6. Consider incorporating history signage and nature signage associated with landmarks such as local cemeteries, Downtown, and natural areas into the Pedestrian Route Network, along greenways and sidewalks.*

*Action CS 7. Place attractive trash receptacles at strategic locations to discourage litter and*





maintain a clean appearance.

*Action CS 8.* Encourage and/or require private owners (of residences and businesses) to keep their area in and around the sidewalk free of debris and litter.

*Action CS 9.* Continue and expand ongoing Downtown Streetscape Project with specific Downtown design improvements.



The downtown area is the center point of Graham with many historic buildings. Pedestrian policies can help strengthen the Downtown as a City asset.

## Land Use/Development

*Promote land uses and site designs that make walking convenient and enjoyable.*

*Action CS 10.* Use building and zoning codes to encourage a mix of uses, connect entrances and exits to sidewalks, and eliminate “blank walls” to promote street level activity.

*Action CS 11.* Promote parking and development policies that encourage multiple destinations within an area to be connected by pedestrian trips. Specifically, promote the connectivity of parking lots between businesses for increased safety and avoidance of roadway traffic.

*Action CS 12.* Consider implementing “pedestrian only” areas in locations with the largest pedestrian volumes.

*Action CS 13.* Require contractors to provide safe, convenient, and accessible pedestrian rights-of-way along construction sites that require sidewalk closure.

*Action CS 14.* Encourage programs to clean up trash and blighted buildings at the street level and expand the use of business associations in this regard.

*Action CS 15.* Encourage the inclusion of public walkways or trails in large, private developments.

*Action CS 16.* Assure safe pedestrian access through large parking lots.

*Action CS 17.* Encourage the development of pocket parks and plazas that are along the Pedestrian Route Network.

*Action CS 18.* Discourage motor vehicle parking facilities that create blank walls, unscreened edges along sidewalks, and/or gaps between sidewalks and building entrances.



*Action CS 19.* Develop Downtown Walking Trail program and map.

*Action CS 20.* Consider mass transit in the future and if implemented locally or regionally, create a safe pedestrian/mass transit interface that includes sidewalk connections to transit stops and adequate shelters.

### 4.3 Other Policy Recommendations

#### 4.3.1 Future Pedestrian Facility Development

To ensure that the pedestrian facilities recommended in this document are constructed, the elected leaders should allocate sufficient resources on an annual basis to regularly expand the pedestrian network and maintain the facilities as they are completed. Currently, Graham sets aside \$100,000 a year for sidewalk improvements and maintenance over the next ten years. This is an excellent start and the commitment should be improved and continued in the future. There must be commitment to a phased timeline of roadway modification and facility construction must be adopted and followed.

Pedestrian facilities should be developed as prioritized in this Plan but consideration should be given to citizens who make specific complaints or requests. Currently citizens may make requests directly to the City. It should be the policy of the City to seriously consider these requests and also monitor changes and new development that may cause other future pedestrian issues not faced at the time of this Plan.

The City can claim right-of-way (ROW) for sidewalk development in front of properties throughout a good portion of the city. Older parts of the city may not have ROW for sidewalks. The City should form a list of roadways with ROW and without ROW and develop a strategy for obtaining ROW where sidewalk segments need to be constructed.

Graham should also take advantage of roadway reconstruction and widening along with bridge reconstruction projects and railroad crossings. These projects offer excellent opportunities to incorporate facility improvements for pedestrians including the addition of sidewalks, crossing improvements, and pedestrian underpasses. This is further described in Chapter 5 - Implementation.

Regarding potential future pedestrian facilities on state roads, it will be important to understand how NCDOT and the Burlington-Graham MPO are involved in the approval process for construction, reconstruction, repaving, and bridge projects on different roads in the Graham area. If NCDOT has the authority to deny a recommendation from the pedestrian plan, it will be important to discuss controversial issues with them during the planning process. The issues could potentially include:

- Bridge culverts/underpasses
- I-40/85 underpass and on/off ramps
- Shoulder regrading and drainage
- Adequate easement acquisition for new road pedestrian facilities



Regarding residential development sidewalk construction, sidewalks should be constructed during the infrastructure development of the subdivision (roads, curbs/gutter, etc). This is less expensive because of the ability to conduct the infrastructure development at one time. If the sidewalk is damaged during home construction though, the sidewalk should be repaired at the contractor's cost (This should be addressed in development regulations). On a case-by-case basis, the City could allow sidewalks to be constructed after home construction is complete as long as grading has been planned out and done correctly to allow for sidewalk construction. While it is recommended that sidewalks be constructed with the rest of subdivision infrastructure to reduce costs, the City could negotiate on a case-by-case basis with the developer.

Sidewalk should be extended across driveway cuts to maintain the continuity of the sidewalk and reinforce to the driver that he/she should yield to pedestrians (which is required by law). Also, driveway aprons should not extend through the sidewalk area of the driveway, which must also be constructed at a maximum 2% cross slope.

Finally, a provision should be included in local ordinances requiring that non-motorized facilities built as part of a subdivision project be extended beyond the limits of the subdivision boundaries to connect to trip attractors and adjacent developments.

#### 4.3.2 Maintenance

Once the proposed network has been adopted by the City and efforts to implement the network are underway, focus should be directed towards the maintenance and enhancement of the system. Well maintained and managed facilities are critical elements to the long-term success and accessibility of Graham's pedestrian network. Regular maintenance of the community's pedestrian facilities will be essential to maintain the safety of the facilities and their overall usability. To facilitate the practice of regular maintenance, the City of Graham should allot adequate funding for maintenance out of its yearly budget described in Section 4.3.1 and develop a schedule of maintenance activities for the pedestrian network along with the existing maintenance projects of the NCDOT and the Graham Public Works Department.

The Public Works Department should also have a process in place to attend to specific maintenance issues. The Department should quickly respond to citizen reports of damaged surfaces. There are incidences when surfaces need improvement. Repair work by the City or a local firm should be considered as a less expensive alternative to completely replacing the sidewalk. Care should be taken to prevent vegetation from encroaching into walkways as well. Clearances and sight distances should be maintained at driveways and intersections. A regular pruning and maintenance program is advised to remove vegetation litter.



Types of maintenance required include:

- Repair of surface
- Repair of trails
- Restriping of crosswalks/pavement markings
- Replacement or repair of route signs due to damage caused by vandalism or general wear
- Removal of any collected debris (including sand, gravel, trash and vegetation)
- Pruning to keep sight distances and clearances adequate

Many of these maintenance projects are already regularly scheduled along the area's roadways. They now must simply be expanded to include the pedestrian facilities as well. Off-road pedestrian routes may require the attention of separate agencies. Local civic groups could contribute by "adopting-a-trail" and regularly maintain trail segments. The City should develop a standard pedestrian maintenance schedule for incorporation into the activities of all the appropriate City agencies. Many of the basic roadway maintenance tasks, such as debris removal, can be combined to reduce the number of hours needed to complete tasks and maximize the use of City resources.

Finally, it should be the responsibility of the owner or occupant of private property to keep their property and adjacent sidewalk free of litter and debris. Basic cleanliness should be maintained by local residences and businesses. Properly-placed signage and garbage cans can help encourage clean sidewalks.

#### 4.3.3 Annexation

For areas eligible for annexation under North Carolina's statutes, plans are developed to provide all required municipal services and an estimate for providing such services<sup>2</sup>. If pedestrian facilities are to be included in annexed areas, they should be addressed in the annexation study and should be included in an update of any City plan that addresses such facilities, such as the Graham Pedestrian Plan.

Services that will require no extensive capital outlay, such as crosswalk striping, could be provided within a short time. With respect to services involving capital outlays, such as greenway trail development or bike/pedestrian bridges, it should be remembered that: (1) extension of improvements should be commensurate with other parts of the City and should be related to the needs of present settlement and future growth, and (2) extensions should be based on previously approved policies and standards. Therefore, if the City of Graham is to ensure consistent pedestrian facilities in annexed areas, the first step will be adopting the Graham Pedestrian Plan. Furthermore, residents in the annexed area do not expect to be taxed without benefits, but they should also not expect a disproportionate balance of improvements at the expense of the other residents. Therefore, an annexation ordinance that addresses improvements, such as pedestrian facilities, should take this



balance into account when defining the services to be provided.

In some cities, such as Fayetteville, NC, facilities (such as sidewalks for example) are not something the City provides as a base service for annexed areas<sup>3</sup>. However, they have addressed such improvements through other means: they adopted a plan for sidewalk development based on pedestrian traffic and safety, so as the area becomes part of the City, it is eligible for the same improvements based on need. Additionally, the City has subdivision regulations in place that require developers to construct sidewalks on one side of the street in new developments. These are examples of ways in which Graham can put policies in place that apply to the City as a whole, which would immediately include new areas once they are annexed.

#### 4.3.4 Local Ordinances

Local ordinances are another means to develop and encourage safer pedestrian activity across Graham which in turn could lead to larger numbers of people walking. There should be an effort to seek out ordinances that may need updating and/or to develop new ordinances that would relate to the new pedestrian network.

The City should also be aware of North Carolina laws relating to walking in *The Guide to North Carolina Bicycle and Pedestrian Laws*. A portion of this booklet discusses local ordinances and the issues sometimes addressed by these ordinances. If issues arise in the City of Graham, the City can consider developing ordinances that would be enforced by local police. Common issues are bicycling on sidewalks, greenway uses and hours of operation, etc.

### 4.4 Program Recommendations

Education, encouragement, and enforcement programs should be in place to teach and encourage safety and to ensure the success and integrity of Graham's future pedestrian network.

#### 4.4.1 Education, Encouragement, Enforcement

The recommended pedestrian facilities identified in Chapter 4 will most successfully serve the City of Graham with continued support for walking, built through programs that focus on education, encouragement, and enforcement. Many of the following programs were suggested by members of the steering committee. Additional resources can be found on the NCDOT Division of Bicycle and Pedestrian Transportation website (<http://www.ncdot.org/transit/bicycle/>).

Education: Long term educational strategies should be developed to teach and promote safety. A good education program provides instruction in lawful behavior for pedestrians and motorists. This education should be available to children and adults alike. This will require coordinated efforts through the City, citizens, and local groups.





Children are the current and future users of Graham's pedestrian network. Teaching children about the benefits of walking and pedestrian safety can foster lifelong habits. Local schools should be used to teach children about pedestrian safety *and* the benefits of walking. Crossing guards are an excellent means to provide safety and education. Instruction programs and events for children should also be available in Graham through the Recreation and Parks Department. The National Safe Routes to School program also offers a national course that would be very beneficial to Graham. Pedestrian instruction for teenagers can be taught in driver's education courses. Families should also be given tools to help them understand how walking can improve their health. Many resources for children's education on pedestrian safety can be found through the Pedestrian and Bicycle Information Center's website, [www.walkinginfo.org](http://www.walkinginfo.org). Listed below are some of the resources provided by the Center related to children's education:

- *Walking School Bus*  
A walking school bus is an encouragement program that provides an alternative way to transport children to school. A parent can be responsible for accompanying a group of children to school by utilizing the pedestrian system in Graham.  
<http://www.walkingschoolbus.org/>
- *Walk to School Day*  
The web site offers a history of Walk to School Day, child pedestrian information, resources for planning events and online registration.  
<http://www.walktoschool.org>
- *Preventing Pedestrian Crashes: Preschool/Elementary School Children*  
Provides information to parents on pedestrian risks for preschool and elementary school children. Safe and Sober Campaign. Taken from the NHTSA website.  
<http://www.nhtsa.dot.gov/people/outreach/safesobr/15qp/web/sbprevent.html>
- *Kidswalk-to-School:*  
This guide is a resource to help communities develop and implement a year-long walk-to-school initiative. Centers for Disease Control and Prevention.  
[http://www.cdc.gov/nccdphp/dnpa/kidswalk/kidswalk\\_guide.htm](http://www.cdc.gov/nccdphp/dnpa/kidswalk/kidswalk_guide.htm)
- *Pedestrian Injury:*  
Pedestrian injury remains the third leading cause of unintentional injury-related death among children ages 5 to 14. SafeKids.  
<http://www.safekids.org/>
- *Pedestrian Fatalities Related to School Travel:*  
This is a fact sheet pertaining to school age children. NHTSA.



[http://www.nhtsa.dot.gov/people/injury/pedbimot/ped/Getting\\_to\\_School/pedestrian.html](http://www.nhtsa.dot.gov/people/injury/pedbimot/ped/Getting_to_School/pedestrian.html)

- *Rules of the Road for Grandchildren: Safety Tips*  
If you are a grandparent, you can play an important role in teaching your grandchildren the “rules of the road.” AARP.  
<http://www.aarp.org/confacts/grandparents/rulesroad.html>
- *Streets in America are unsafe and unforgiving for kids:*  
Article by the Pedestrian Safety Roadshow. U.S. Department of Transportation. Federal Highway Administration.  
<http://www.tfhrc.gov/safety/pedbike/articles/unsafe.htm>
- *Focusing on the Child Pedestrian:*  
Pedestrian Information from the FHWA.  
<http://safety.fhwa.dot.gov/roaduser/pdf/PedFacts.pdf>

Events sponsored by the Graham Recreation and Parks Department may provide opportunities for adult education. For example, the City could hold a Pedestrian Day in the spring for children and adults and offer training classes all summer. A great resource for older adult education on pedestrian safety, called *Stepping Out* can be found through the National Highway Traffic Safety Administration’s website, [www.nhtsa.dot.gov/people/injury/olddrive/SteppingOut/index.html](http://www.nhtsa.dot.gov/people/injury/olddrive/SteppingOut/index.html) *Stepping Out* tells older adults how to maintain their safety while walking - whether walking for exercise or to run errands. The *Stepping Out Webpage* provides the following:

- A quick refresher on the health benefits of walking.
- Resources for getting started and planning what level of activity is best for you.
- Ideas for incorporating walking into your everyday schedule and staying motivated to continue walking.
- Tips for staying safe at intersections, in parking lots, in non-sidewalk areas, and in bad weather.
- Suggestions for making your community a safer place to walk.

Having such information available to the public and older populations in the form of a news article, flyer, a City website link, or a combination of these, would help to increase education and awareness for adults.

Education may also be provided through various print and electronic media. Safety tips for pedestrians and motorists could be featured on a local cable television channel. A pedestrian brochure could include educational items about proper skills, road crossings, and habits. Also, the City of Graham website could provide educational materials. According to the Pedestrian



and Bicycle Information Center, the following items cover the basics to be included in pedestrian educational materials:

*Things to remember as a driver:*

- You can encounter pedestrians anytime and anywhere - even in places where they are not supposed to be found.
- Pedestrians can be very hard to see - especially in bad weather or at night. You must keep a lookout and slow down if you can't see clearly.
- Stop for pedestrians who are in a crosswalk, even if it is not marked. When you stop for a pedestrian in a crosswalk, stop well back so that drivers in the other lanes can also see the pedestrian in time to stop.
- Cars stopped in the street may be stopped to allow a pedestrian to cross. Do not pass if there is any doubt!
- Don't assume that pedestrians see you or that they will act predictably. They may be physically or mentally impaired - or drunk!
- When you are turning, you often will have to wait for a "gap" in traffic. Beware that while you are watching for that "gap", pedestrians may have moved into your intended path. Don't run someone down.
- Be especially attentive around schools and in neighborhoods where children are active. Drive there like you would like people to drive in front of your own home!

*Things to remember as a pedestrian:*

- Be predictable. Stay off freeways and restricted zones. Use sidewalks where provided. Cross or enter streets where it is legal to do so.
- Where no sidewalks are provided, it is usually safer to walk facing road traffic (This is also the law).
- Make it easy for drivers to see you - dress in light colors and wear reflective material. It might be wise to carry a flashlight in very dark areas.
- Buy "workout" clothes that incorporate reflective materials and that are highly visible.
- Be wary. Most drivers are nice people, but don't count on them paying attention. Watch out - make eye contact to be sure they see you!
- Alcohol and drugs can impair your ability to walk safely, just like they do a person's ability to drive.
- Use extra caution when crossing multiple lane, higher speed streets.

(Source: Pedestrian and Bicycle Information Center, [www.walkinginfo.org](http://www.walkinginfo.org).)



**Encouragement:** Encouragement programs should be initiated to help build a larger pedestrian community. Financial incentives and/or public praise can be provided to local businesses that support walking through their actions. Awards can be created to celebrate advances in the community's pedestrian facilities, pedestrian use, and overall pedestrian friendliness.

There are a variety of means to promote walking. Pedestrian booths could distribute information at local events and festivals such as *Thursdays After Seven*. Local businesses and tourist information centers could distribute pedestrian maps and information. Inserts into local newsletters can detail the health benefits of walking. Mileage clubs could be established and awards given to those who reach their goals. Walking school buses could be established where adults take turns leading groups of children to school. Specific day programs such as Walking Wednesdays could be designated for walking to school and work. An annual Pedestrian Day could be sponsored by the Graham Recreation and Parks Department with promotions, contests, and education programs. National Trails Day, celebrated nationwide annually in June, could become an annual event along one of Graham's greenways.

A new local program in the City of Graham, the *Graham Walks Project*, offers great opportunities for pedestrian encouragement. The *Fit Community Grant*, which will fund the project, came out of a partnership between the City of Graham, Healthy Alamance and Alamance County Health Department. As the lead agency, the City of Graham Recreation and Parks Department will develop a Downtown Walking Trail and kick-off a new walking program that will run for six weeks in the fall and spring, starting on September 28, 2006. Additionally, the project will include construction of a perimeter trail for Cooke Park, providing opportunities for walking, jogging, and biking.

Graham could also tap into many of the existing national encouragement programs:

- *National Walk our Children to School Day* is usually held in October with the objective to encourage adults to teach children to practice safe pedestrian behavior, to identify safe routes to school, and to remind everyone of the health benefits of walking. To register walking events in the City of Graham, go to the main webpage, and follow the International Walk to School links: [www.walktoschool-usa.org](http://www.walktoschool-usa.org)
- *Safe Routes to School* is a national program with \$612 million dedicated from Congress from 2005 to 2009. Local Safe Routes to School programs are sustained by parents, community leaders, and citizens to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school. The



Safe Routes to School activity in Durham, NC



website is <http://www.saferoutesinfo.org/>. As of 2006, the North Carolina Safe Routes to School program has \$15 million over five years for infrastructure improvements within two miles of schools. It also offers programs and workshops held at schools that request guidance. There is an application process and schools that hold workshops and programs will be likely candidates for the capital improvement money.

- *Safe Communities*, is a project of the National Highway Traffic Safety Administration (NHTSA). Nine agencies within the U.S. Department of Transportation are working together to promote and implement a safer national transportation system by combining the best injury prevention practices into the Safe Communities approach to serve as a model throughout the nation. To get them involved in the City of Graham, start by visiting their website, <http://www.nhtsa.dot.gov/safecommunities/>
- *Safe Kids Worldwide* is a global network of organizations whose mission is to prevent accidental childhood injury, a leading killer of children 14 and under. More than 450 coalitions in 15 countries bring together health and safety experts, educators, corporations, foundations, governments and volunteers to educate and protect families. Visit their website to receive information about programs, involving media events, device distribution and hands-on educational activities for kids and their families: <http://www.usa.safekids.org/>
- *America Walks* is a national coalition of local advocacy groups dedicated to promoting walkable communities. Their mission is to foster the development of community-based pedestrian advocacy groups, to educate the public about the benefits of walking, and, when appropriate, to act as a collective voice for walking advocates. They provide a support network for local pedestrian advocacy groups. To get started visit their website, <http://americawalks.org>.

**Enforcement:** Enforcement is critical to ensure that proper actions are being taken by both pedestrians and motorists and that the rights of each are recognized. A local law enforcement program for a shared transportation system should be developed for Graham. Appropriate and updated pedestrian traffic laws are an important first step in developing an adequate enforcement program. The most effective pedestrian ordinances distinguish between motorized vehicles and pedestrians and clarify the manner in which each shall lawfully share the roadways. Existing state traffic laws should be reviewed to ensure that appropriate rules and regulations are applied to Graham's pedestrian network. This will result in a meaningful policy of which to enforce.

Enforcement truly requires the action of everyone including parents, teachers, and police officers. Officers should take an active role in





enforcement, teaching safety, evaluating traffic concerns, providing a presence, and giving warnings or tickets to those who disobey the law. Law enforcement officers can also set reasonable enforcement targets, with enforcement actions being a verbal warning or a citation:

*Reasonable Enforcement Targets Regarding Pedestrians:*

- Pedestrians who push through a crowd of people waiting for a “walk” light and cross illegally.
- Pedestrians who enter a stream of traffic and disrupt the flow.
- Pedestrians who “dash out” into the path of oncoming cars.
- Pedestrians who are drunk (take to a place of safety).

*Reasonable Enforcement Targets Regarding Drivers:*

- Drivers speeding near schools or in neighborhoods where children live.
- Drivers not complying with crosswalk right-of-way laws.
- Drivers who overtake and pass a car stopped at a pedestrian crosswalk. Officers who observe this violation should issue a citation.

Simply sharing this list of enforcement targets with the City of Graham Police Department could kick-off a change in the way pedestrian safety is enforced. Additionally, local law enforcement should refer to and be competent with the NCDOT’s *A Guide to North Carolina Bicycle and Pedestrian Laws*. This is available online at: <http://www.ncdot.org/transit/bicycle/laws/resources/BikePedLawsGuidebook-Full.pdf>. For an online resource guide on laws related to pedestrian and bicycle safety (provided by the National Highway Traffic Safety Administration), visit [www.nhtsa.dot.gov/people/injury/pedbimot/bike/resourceguide/index.html](http://www.nhtsa.dot.gov/people/injury/pedbimot/bike/resourceguide/index.html)



## (Footnotes)

<sup>1</sup>NCDOT's Bicycling & Walking in North Carolina, a Critical Part of the Transportation System (adopted by the Board of Transportation on September 8, 2000). [http://www.ncdot.org/transit/bicycle/laws/laws\\_resolution.html](http://www.ncdot.org/transit/bicycle/laws/laws_resolution.html)

<sup>2</sup> Charlotte-Mecklenburg Planning Commission. Annexation - Frequently Asked Questions. Retrieved on 11/30/05 from [www.charmeck.org/Departments/Planning/Annexation/Annexation+FAQ.htm](http://www.charmeck.org/Departments/Planning/Annexation/Annexation+FAQ.htm)

<sup>3</sup> Town of Fayetteville. Often Asked Smart Growth Questions and Corresponding Answers. Retrieved on 11/30/05 from <http://www.townoffayetteville.org/sgn/faq.htm>

## References

*Guide for the Planning, Design, and Operation of Pedestrian Facilities.* American Association of State Highway and Transportation Officials (AASHTO). July 2004.

*Pedestrian Master Plan.* The City of Oakland. Part of the Land Use and Transportation Element of the City of Oakland's General Plan. November 12, 2002. [http://www.oaklandnet.com/government/Pedestrian/Ch\\_4.pdf](http://www.oaklandnet.com/government/Pedestrian/Ch_4.pdf)

Pedestrian and Bicycle Information Center. [www.walkinginfo.org](http://www.walkinginfo.org)

