



Section 4. Existing Plans and Policies

4.1. Introduction

In order to thoroughly address Cary's needs, it is necessary to understand how the physical elements of the pedestrian system – sidewalks, greenways, roadway crossings – are planned and designed using guiding policies and plans. This section describes the current plans, policies, and programs in place to build and design pedestrian facilities and makes recommendations for their improvement. A prioritization of the recommendations is also provided.

4.2. Existing Plans Analysis

The following paragraphs provide analysis and recommendations for improvements to other previous plans and documents prepared for the Town which have contained pedestrian related elements. Recommendations are made for the following documents:

- ◆ January 2001 Comprehensive Transportation Plan – Pedestrian Element
- ◆ August 2001 Town Center Area Plan
- ◆ August 2001 Design Guidelines Manual
- ◆ September 2002 Northwest Area Plan
- ◆ December 2003 Parks, Recreation, and Cultural Resources Facilities Plan
- ◆ August 2004 Southwest Area Plan
- ◆ Land Development Ordinance (LDO)

Appendix 7 provides a synopsis of each of these documents. In general, all of Cary's Plans contain language to support pedestrian activity in the Town. They recognize the value of a comprehensive pedestrian circulation system and address both the needs of walkers who are headed to a particular destination as well as creating destinations along pedestrian pathways. They also consider linkages within the system and the needs of the commuting pedestrian. The policy statements are clear in their intent. In addition, the plans collectively recognize the role of pedestrian facilities in establishing and supporting the desired land use patterns for Cary. Goals they have in common include:

- ◆ Planning for a multi-modal transportation system which includes automobile, pedestrian, bicyclist, handicapped, and transit
- ◆ Considering and taking advantage of opportunities to improve pedestrian facilities and access in concert with or at the same time as thoroughfare improvements

Cary Pedestrian Plan

Section 4: Existing Plans and Policies

- ◆ Providing alternative transportation linkages among existing greenways, on-road bikeways, and sidewalks to key destinations within the Town
- ◆ Using greenways adjoining many roads in the area
- ◆ Developing a variety of trail types that reflect the current diversity of trail users
- ◆ Development should be pedestrian friendly with the ability to walk to transit connections
- ◆ Development should focus on mixed-use, higher density developments, and traditional neighborhood development (TND), all of which are enhanced by a well developed pedestrian access system

The following are recommendations for general modifications to existing and any future Plans, as well as specific changes to each Plan.

Recommendations:

Comprehensive Transportation Plan – Pedestrian Element

- ◆ *Include trails in the system. This focuses on sidewalk to the exclusion of the greenways and trail system.*

Town Center Plan

- ◆ *Update to have sidewalk requirements for both sides of the street per adopted Streetscape Plan.*
- ◆ *Identify needed connections to Cary's greenway system.*

Cary Design Guidelines Manual

- ◆ *Revise to clarify design guidance for sidewalk, greenways, and multi-use paths. Currently, the Manual's guidance for sidewalks seems to conflict with the recommendation for sidewalks on only one side of secondary streets contained in the Town Center Plan and LDO.*

Cary Parks, Recreation, and Cultural Resources Facilities Master Plan

- ◆ *Since this plan is the most comprehensive among the plans reviewed in addressing the multiple purposes of walking and pedestrian facilities, it would be beneficial for the master plan to reference the area plans.*
- ◆ *Update plan to include guidance to be followed by Town Staff and the Greenways Committee for determining when developers should build greenways.*

Southwest Cary Area Plan

- ◆ *Address walking in rural areas to improve safety. This plan is centered on a rural area of Cary and as such focuses on greenways for pedestrian access. It does not recognize that walking on the roadway edges for recreation or exercise is a common activity in rural areas. The plan recommends four-foot shoulders along rural roadways, but this is expressly to accommodate bicyclist needs. One way to address this is to require sidewalk for pedestrians, in addition to four foot shoulders.*

Land Development Ordinance

- ◆ *Include opportunities to claim a reduction in trip generation for trips diverted to alternate modes of transportation, including walking.*
- ◆ *Update to refer to new Parks and Greenways plan rather than old one.*
- ◆ *Provide incentives to developers to provide exemplary pedestrian circulation systems.*
- ◆ *Town staff should review parking requirements in downtown (and at other activity centers) and consider creating more leniency in the requirements or reducing them.*
- ◆ *Strengthen Pedestrian Connectivity and Greenway Requirements. In the following Section 4.3 Policies, several options are discussed to improve and strengthen connectivity and greenway requirements, which would require modifications to the Land Development Ordinance and other Plans.*

4.3. Policies

4.3.1. Sidewalk Request Program and Policies

Cary's sidewalk request program is a detailed approach to prioritizing and constructing new sidewalk as requested by town citizens and staff independent of roadway construction, roadway improvement, or development projects. The following is a brief description of the sidewalk request program and how new sidewalk projects are constructed.

Sidewalk Request Process

New sidewalk in existing developed areas can be requested from two sources:

- ◆ via a petition process sponsored by a Cary citizen, or
- ◆ a request from Town Staff.

Cary Pedestrian Plan

Section 4: Existing Plans and Policies

Requests for sidewalks in residential neighborhoods must be accompanied by a petition signed by at least 70 percent of the homeowners in the area of influence. The Planning Department provides a map and addresses for the area of influence. Once the petition process is complete, sidewalk is placed on the sidewalk request list by Town Planning Department staff and ranked relative to the other requested sidewalk projects. Requested sidewalk projects must meet the following criteria:

- ◆ Streets along which sidewalk is to be installed shall be paved and have curb and gutter along both sides. Streets without curb and gutter will be considered with a lower priority.
- ◆ There shall be at least six (6) feet of right-of-way between the back of curb and the adjoining property line.
- ◆ The sidewalk shall be installed in accordance with the Town of Cary Standard Specifications and Details.

Sidewalk Prioritization

Once on the sidewalk project request list, sidewalk projects are ranked based on the following factors:

Highest Priority (greatest weight)

- Current Pedestrian Use
- School Proximity

Next Priority

- Average Daily Traffic (ADT)
- Public Park/Recreation Facility Proximity
- Development Activity Center Proximity
- Greenway Proximity

Next Priority

- Existing Sidewalk Proximity/Connectivity
- Other Factors (Right-of-Way, Curb & Gutter, Utilities, Topo, etc.)

Lowest Priority

- Mass Transit Stop Proximity
- Consecutive Years on Priority List

Sidewalk Project Approval and Construction

Each year, sidewalk projects are re-prioritized to include new and remaining unfunded project requests. Top-ranked sidewalk requests are eligible for funding through the Town's Capital Improvements Budget. Town Staff recommends the top-ranked projects to Town

Council to approve for funding of design and construction. Once Town Council approves staff recommendations, the projects will move forward to Engineering Staff to be scheduled for design and construction. Usually, five to seven projects are selected annually. If a project is too large to be constructed easily in one lump sum, it will often be broken into phases to be completed over several years so that other projects may also be funded each year.

Sidewalk Project Funding Sources

The Town of Cary maintains an annual budget as part of its Capital Improvements Budget for construction of approved sidewalk projects. Cost estimates for each project are based on a fixed cost of \$50 per linear foot for sidewalk. This fixed cost was recently raised from \$35 per linear foot in order to compensate for extra expenses incurred during construction and right-of-way acquisition. An additional fee of \$25 per linear foot should be included for locations without curb and gutter.

Once Town Council approves staff recommendations for the annual list of funded sidewalk projects, engineering staff then assign a project manager to oversee the project through design and into construction. Historically, the Town has reserved about \$500,000 in the annual budget for sidewalk construction. In 2007, the Town allotted \$1 million for sidewalk construction.

4.3.2. Sidewalk Maintenance Policy

Currently, the Town has not established a formal sidewalk maintenance policy. Sidewalk maintenance requests may be made to Town Staff, who will then schedule the necessary repairs. The urgency of the repair is based upon the level of degradation of the sidewalk, pending projects in the vicinity, and magnitude of cost of the repair.

Recommendation: It is recommended that a formal sidewalk maintenance policy and program be established in the near future. This may prevent future potential issues as the Town's sidewalks age and maintenance requests increase.

4.3.3. Traffic Calming Program and Policy

Cary's Policy Statement 124, adopted by Town Council on January 13, 2005, established the Town's Traffic Calming criteria and guidelines. According to this policy, traffic calming measures are only applicable in residential neighborhoods. Traffic calming requests must be reviewed by the Town's engineering staff, police and fire department, and undergo a petition process (outlined in Policy 124). It is important to consider traffic

Cary Pedestrian Plan

Section 4: Existing Plans and Policies

calming efforts in a pedestrian plan because these often go hand-in-hand with improvements to make a location more pedestrian-friendly. By slowing traffic, a streetscape becomes a more comfortable and safer location for pedestrians. In addition, many traffic calming measures often include improvements to pedestrian facilities such as adding sidewalk, reducing curb radii to allow for shorter crossing distances, and providing bulb outs. Curb radii, bulb outs, medians, and pedestrian islands are all discussed in **Section 5.3 Design Guidelines and Standards: Special Considerations** of this Plan.

Recommendation: *It is implied in Policy 124 that traffic calming consists entirely of speed humps or speed tables. It is recommended that the Town consider expanding its traffic calming approaches to include bulb-outs, reductions in curb-radii, medians, and pedestrian islands. This should allow for more flexibility in traffic calming approaches while also improving conditions for pedestrians.*

4.3.4. Connectivity Policies

During the course of the Pedestrian Plan preparation process, a need was identified for stronger pedestrian-related requirements for new developments, both residential and non-residential. In new developments adjacent to existing development, stronger requirements are needed for both on and off-road pedestrian connections between cul-de-sacs and connecting various land uses and neighboring developments to schools, libraries and greenways. In isolated new developments, there should be requirements for both sidewalk and greenway stub-outs to connect to future nearby development. For both types of locations,

Currently, Cary's Land Development Ordinance (LDO) is the over-arching document to direct development in the Town. The LDO is augmented by the *Cary Design Guidance Manual* (Manual), which identifies recommended development practices. The Town's *Parks, Recreation and Cultural Resources Plan* also provides guidance for greenways, certain types of sidewalk, and greenway/sidewalk crossings.

The following recommendations provide a variety of options for improving Cary's policies to require an increased level of pedestrian connectivity in future development. Some of these recommendations focus specifically on slight language changes in the LDO, while others address additions to the LDO.

1. Modify Language in the LDO and *Design Guidelines Manual*.

Changes to the LDO. The following modifications to the text of the LDO place emphasis on including pedestrian connections along with vehicular connections in Cary's Connectivity Ordinance and also reinforce existing pedestrian requirements. The following text provides recommended language in bold and red in certain sections of the LDO.

B. Street Arrangement.

1. The proposed public or private street system shall be designed to provide vehicular **and pedestrian** interconnections to all similar or compatible adjacent uses (existing and future) when such interconnections would facilitate internal and external travel... If the common property boundary in any direction is less than 1,250 linear feet, the subject property will be required to provide an interconnection if it is determined by the Planning Director that the interconnection in that direction can best be accomplished through the subject property... The intent of this standard is to improve access/egress for Town neighborhoods, provide faster response time for emergency vehicles, and improve the **vehicular and pedestrian** connections between neighborhoods.
2. Any development of more than 100 residential units or additions to existing development such that the total number of units exceeds 100 shall be required to provide vehicular **and pedestrian** access to at least two public streets unless such provision is deemed impractical...
3. Where new development is adjacent to vacant land likely to be divided in the future, all streets, bicycle paths, **sidewalks or pedestrian pathways** and access ways in the development's proposed street system shall continue through to the boundary lines of the area under the same ownership as the subdivision, as determined by the Planning Director or the Town Engineer, to provide for the orderly subdivision of such adjacent land or the transportation and access needs of the community. In addition, all redevelopment and street improvement projects shall take advantage of opportunities for retrofitting existing streets to provide increased vehicular and pedestrian connectivity, **such as sidewalks, chatwalks, crosswalks, and pedestrian signals.**
4. In general, permanent cul-de-sacs and dead-end streets are discouraged in the design of street systems, and should only be used when topography, the presence of natural features, and/or vehicular safety factors make a vehicular connection impractical. Where cul-de-sacs or dead-end streets are unavoidable, site and/or subdivision plans shall incorporate provisions for future vehicular **and pedestrian** connections to adjacent, undeveloped properties, and to existing adjacent development where existing connections are poor. **A chatwalk should be constructed where a vehicular connection is impossible.**

C. Cross Access.

Cary Pedestrian Plan

Section 4: Existing Plans and Policies

All non-residential development shall be designed to allow for **both vehicular and pedestrian** cross-access to adjacent properties to encourage shared parking and shared access points on public or private streets. A minimum distance of 100 feet shall be required between a cross-access way and an intersection or driveway entrance. When **vehicular** cross-access is deemed impractical by the Planning Director on the basis of topography, the presence of natural features, or vehicular safety factors, this requirement may be waived provided that appropriate bicycle and pedestrian connections are provided between adjacent developments or land uses. A cross access easement must be recorded prior to issuance of a Certificate of Occupancy for the development.

§ 7.10.4 Standards for Pedestrian Facilities

A.6. Where residential **and non-residential** developments have cul-de-sacs or dead-end streets, such streets shall be connected to the closest local or collector street or to cul-de-sacs in adjoining **residential subdivisions, commercial development, or similar compatible land uses including schools, parks, recreation facilities, libraries, and greenways,** via a sidewalk or multi-use path, except where deemed impractical by the Planning Director.

Changes to Design Guidelines Manual. Although the Manual addresses pedestrian needs in all three of its sections (Design Principles, Development Types, and Guidelines Toolkit), the Manual in general needs a greater emphasis on providing specific pedestrian connections, such as chatwalks and greenways. Without adding new requirements for the Manual, the following textual modification is recommended:

Page 10. Connect Uses, Characteristics of Connectivity:

5. **Streets stubs, sidewalks, and pedestrian pathways to adjacent developable** sites are provided in existing developments for future connections between new projects and uses.

2. Add Language to the LDO and *Design Guidelines Manual*.

The following recommendations look at adding language to the LDO and Design Guidelines Manual that would put new requirements on developers for specific actions. These requirements are stricter than the existing requirements, and are listed in sequence from least to most dramatic changes.

a. **Include requirements for pedestrian connections that minimize the pedestrian travel time distance between specific, explicitly defined land uses.** Pedestrian connections should be defined as sidewalks adjacent to roads, greenways, and chatwalks. Compatible land uses should be defined as: commercial and

commercial; residential and residential; office and commercial; residential and commercial; and, residential and office. In addition, to these land uses, pedestrian connections should also be required to schools, greenways, libraries, parks, recreation facilities, and other public locations. In the LDO, text could be added to §7.10.4: Standards for Pedestrian Facilities. In the *Design Guidelines Manual*, text may be placed in the “Connect Uses” section under Design Principles, and reiterated in the section “Plan for Pedestrians, Bicyclists, and Transit Users”. Although the Toolbox section “Circulation: Pedestrian Routes” already states “Provide, where feasible, unbroken pedestrian routes between developments”, this text should be modified to include language calling specifically for chatwalks between developments of compatible land uses where sidewalks accompanying vehicular connections are unavailable.

b. **Add language to restrict fences or barricades (landscape or structural) between compatible land uses.** Where chatwalks are constructed, they should not be blockaded by fences or other barriers, such as steep slopes that do not comply with ADA requirements. The pedestrian connection between land uses, such as from residential to commercial, should be a pleasant experience. Where feasible, the pedestrian connection should avoid garbage units, blank walls, poorly lit locations, or other deterrents to pedestrian travel. A requirement could be added into the LDO, and/or language could be included in the Design Manual under the section “Connect Uses” or the Tool Kit sections “Buildings”, “Circulation”, or “Transitions and Screens”.

c. **Create requirements for reservation of greenway space.** Both the LDO and the Design Guidelines Manual call for the reservation of land if proposed or existing greenways are located on the site, however, text could be added to require developers to reserve land not identified on the Parks, Recreation, and Cultural Resources Facilities Master Plan to ensure adequate greenway connectivity. This would mean that the developer must think in terms of the greater pedestrian system context by identifying locations for potential greenway extensions or linkages to existing or proposed greenways.

d. **Create a Pedestrian Connectivity Index/Ordinance.** This recommendation is specific to the LDO, which currently contains a general Connectivity Index that primarily focuses on vehicle access. It is recommended that the LDO be amended to include a Pedestrian Connectivity Index, which would measure the level of pedestrian connectivity both within a site and from the site to the rest of the pedestrian system. The Pedestrian Connectivity Index would consider sidewalks, greenways, and chatwalks as links, and nodes would be roadway

intersections where there is sidewalk, mid-block crossings, and pedestrian intersections independent of a roadway.

e. **Create an Off-site Pedestrian Improvements requirement.** As a part of developing a property, landowners and developers are typically required to make on-site and off-site improvements to public infrastructure to offset potential impacts directly caused or contributed to by the development. While on-site pedestrian improvements and design standards are the most common requirement during the site plan review process, off-site pedestrian improvements – additions to sidewalk, off-street trails, greenways, and crosswalks – are already required in certain situations in many cities in North Carolina and the U.S. These requirements are comparable to similar off-site vehicular improvements and dedications, such as traffic signal modifications, roadway capacity improvements, mitigation for wetland impacts, and intersection improvements. Modifications to the LDO could be made to allow for these off-site pedestrian improvements under certain conditions. (For more information, please see attached “White Paper: Off-Site Pedestrian Improvements.” Prepared by the Louis Berger Group, Inc. for the City of Durham, 2006.)

f. **Add language to require developers to construct “multi-use trails” through a development when it is shown on the Parks, Recreation, and Cultural Resources Facilities Master Plan.** As part of developing a property developers are required to construct sidewalks. A multi-use trail in simple terms is a large sidewalk to allow for shared use of the sidewalk due to the fact that the road is generally very busy that the multi-use trail is adjacent too. In the past the developers would receive credit from the Park Payment-in-lieu fee for constructing the 5’ additional feet of sidewalk. Changing this requirement would no longer provide the credit for construction of the additional 5’ nor for any easement required for the additional space of the multi-use trail.

g. **Add language to require developers to provide public connection(s) to public “multi-use trails” and “greenways”.** The locations of these connections would be determined at time of site plan submittal. These connections would be 6’ to 8’ in width depending on amount of use. Material would be asphalt or concrete.

h. **Add language to indicate that developers should not be compensated for greenway constructions or easements.** Greenways, like roads, are a public good which are necessary for the functioning of a healthy community. Currently, developers build the roads internal to their development without compensation from the Town because it is necessary for these roads to be in place for access to the existing transportation system. Similar to roads, greenways also play an integral role in the town’s transportation system. Thus, developers should provide

greenway access from their development to the existing greenway system at no cost to the Town in the same manner that they would provide roadway access to the existing roadway system in the town. Without access to the greenway system, the development's access to the Town's transportation system as a whole would be inadequate and incomplete.

3. Procedural and program changes.

In addition to changes in the LDO and Design Guidelines Manual, the Town of Cary can also make procedural and programmatic changes to place an emphasis on pedestrian connectivity in site development. The following recommendations include changes to the site plan review process and the establishment of an annual review meeting with developers and town staff to emphasize the existing key pedestrian connectivity points in the LDO and Design Guidelines Manual.

- A. **Require Pedestrian Circulation Study as part of site plan review process.** As a part of the existing "traffic study" requirements, Town planners could request developers include a pedestrian circulation study. This study would provide information on internal-to-the-site pedestrian travel, connections to the pedestrian system externally to the site, and also require developers to consider the future pedestrian use of a location as it becomes more developed, or new types of development are constructed.
- B. **Establish LDO and Design Guidelines Manual review meeting with developers and staff as part of the existing Development Review Committee.** This review meeting between developers and staff would emphasize pedestrian connectivity issues and highlight existing pedestrian requirements, such as LDO Section 7.10.4(A4) and 7.10.4(A6) which require mid-block crossings and sidewalks between cul-de-sacs or dead end streets. This review meeting would also allow staff to explain in more detail situations to developers in which they would like to see better pedestrian connectivity and developers the opportunity to ask questions and provide feedback with staff. A better understanding between developers and Town staff of the existing LDO requirements and recommended practices in the *Design Guidelines Manual* would also mean less time spent in the review process on pedestrian connectivity.

4.3.5. *Greenway Policies*

Currently, every new development within the Town of Cary is reviewed by the Parks, Recreation and Cultural Resources Advisory Board and their sub-committee, the

Cary Pedestrian Plan

Section 4: Existing Plans and Policies

Greenway Advisory Committee. Through staff assistance, each development is assessed in comparison to the *Parks, Recreation, and Cultural Resources Master Plan* to identify if it is near an existing or proposed greenway or park. Approval from both boards is usually based on staff recommendations. According to the Cary Land Development Ordinance (LDO), non-residential developments are required to provide a 30ft-wide easement for a greenway for those locations recommended in the most recently approved Town of Cary Parks, Recreation, and Cultural Resources Department master plan for park and greenway development. Residential developments that include subdivided property are required to provide 1/35 of an acre (1,240 square feet) of parkland for every dwelling unit. In addition, if a proposed Town of Cary greenway crosses the residential development then a credit will be given towards the dedication of a 30ft-wide easement. It is the Town's choice whether to accept the land dedication or a payment-in-lieu. If a payment-in-lieu is required, this is due at the time of preliminary plat approval, or master land use plan approval in the case of a Planned Development, upon finding one of the following situations:

- ◆ all or part of the land required to be dedicated is not suitable for public recreation and open space purposes;
- ◆ the recreational needs of the proposed development can be met by other park, greenway, or recreational facilities planned or constructed by the Town within reasonable proximity to the development; or
- ◆ existing park land is adequate to serve the development.

The payment in lieu fee is used only for the acquisition or development of parks, greenways, open space sites, and related facilities. The amount of the payment in lieu fee is based on the value of the land at the time of rezoning as determined by an independent appraisal. Developers receive credit against the payment-in-lieu fee if they are required to construct a park or greenway facility. The choice of constructing a park or greenway facility is made by the Town.

Additional information on greenway requirements is contained in LDO Chapter 8.1.

The following are some recommendations to strengthen even further Cary's greenway ordinance and increase connectivity in Cary's pedestrian system.

- ◆ Strengthen language in the LDO to require developers to build greenways as part of pedestrian connectivity requirements, rather than use payment in lieu fees.

- ◆ Create requirements that developers must identify connections to existing greenways near their development and build them, just as they would identify and construct connections with existing roads. These adjacent connections should be identified clearly on mapping submitted for site, subdivision, and zoning reviews.
- ◆ The Parks, Recreation, and Cultural Resources Advisory Board and Greenways Committee shall continue to prioritize greenway segments to be constructed and notify developers if they are to construct their section or provide an easement and a payment-in-lieu.
- ◆ Language should be added to clarify the acceptable locations for greenway easements. If a stream only has zone 1 and zone 2 stream buffers, then the greenway easement is required to be outside of zone 2. If the stream has zone 3, then the greenway easements are allowed on the outer edge of zone 3 stream buffers.