Town of South Windsor, Connecticut South Windsor Walk and Wheel Ways Master Plan

Approved March 1, 2010

South Windsor Town Council



Connecting Our Community

March 3, 2010

Mr. Matthew B. Galligan, Town Manager Town of South Windsor 1540 Sullivan Avenue South Windsor, CT 06074

Dear Mr. Galligan:

At its Regular Meeting of March 1, 2010, the South Windsor Town Council approved the following Resolution:

WHEREAS, the South Windsor Town Council recognizes the need to address the growth of the town and the impact on its ability to provide for safe walking and bicycling, and the need to develop a new corresponding plan; and

WHEREAS, the South Windsor Park & Recreation Commission has created a sub-committee known as the "South Windsor Walk & Wheel Ways" so charged to prepare a long-term Master Plan to make South Windsor a bicycle and pedestrian friendly community, which Master Plan has been completed; and

WHEREAS, citizen participation on the sub-committee was a critical element in assessing the community and in the development of the Master Plan; and

WHEREAS, the Master Plan is designed as a comprehensive dynamic document and work-inprogress to guide the best and most efficient development of South Windsor's walking and bicycling infrastructure including multi-purpose trails, safer and more pedestrian/bicycle friendly roads now and in the future; and

WHEREAS, the South Windsor Walk & Wheel Ways Master Plan will be incorporated into the Park & Recreation Commission's Master Plan, which in turn becomes a subset of the Town's overall Master Plan of Conservation & Development

(Resolution Continued on Next Page)

South Windsor Walk & Wheel Ways – Master Plan March 3, 2010 Page 2

NOW, THEREFORE, BE IT RESOLVED that the South Windsor Town Council accepts and adopts the final draft of the South Windsor Walk & Wheel Ways Master Plan, Connecting Our Community, dated January 29, 2010; and

BE IT FURTHER RESOLVED that the South Windsor Town Council recognizes the need to move forward with the implementation phase of the plan.

Respectfully submitted,

Deborah W. Reid Clerk of the Council

cc: Andrew Paterna, Chair, Park & Recreation Commission Ginny Hole, Chair, South Windsor Walk & Wheel Ways Committee Ray Favreau, Director of Recreation

TABLE OF CONTENTS

A	ckno	owledgement	5		
1	V	Vision, Mission and Purpose	6		
	1.1	Vision	6		
	1.2	Mission	6		
	1.3	Purpose	6		
2	History/Background				
3	Definition of South Windsor Walk & Wheel Ways				
4 Goals					
5	Benefits Of Walking and Bicycling				
	5.1	Recreational Benefits	10		
	5.2	Benefits for Families	10		
	5.3	Environmental Benefits / Transportation Alternative	10		
	5.4	Economic Benefits	10		
	5.5	Health Benefits	10		
6	Status of Walking AND Bicycling in South Windsor		11		
	6.1	Existing Off-Road Trails Maintained by the Town of South Windsor	11		
	6.2	Existing Off-Road Trails Not Maintained by the Town	13		
	6.3	Existing On-Road Bike Routes	13		
	6.4	Existing Connections to Other Towns	13		
7	7 Site Assessments		15		
	7.1	Site Visits – Open Space	15		
	7.2	Site Visits – Power Lines	15		
	7.3	Site Visits – Flood Control Projects	15		
	7.4	Site Visits – Blazed Trails	16		
	7.5	Site Visits – Roads	16		
	7.6	General Findings	16		
	7.7	Future Assessment Tools	17		
8	Alliance and Cooperation with Other Programs		18		
	8.1	Town Agencies	18		
	8.2	Town Departments	18		
	8.3	Local Civic Groups	19		
	8.4	Regional And State Programs	19		

9 Fundin	g Sources	21
10 Comm	unications	22
11 Policy,	Planning and Implementation Projects and Improvements	23
11.1	Policy and Planning	23
11.2	Engineering Planning and Design	23
11.3	Off-Road Projects	24
11.4	On-Road Projects	25
11.5	Bike Racks	25
11.6	Share the Road Signs	25
	Safety Education/Enforcement	
12 Referen	nces	27
Appendix A	Site Visit Form	28
Appendix B	Proposed Multi-use Trail Connections	29
Appendix C	Road Improvements	30
Appendix D	Sample On-Road Recreational and Fitness Bike Routes	31
Appendix E	Suggested Bike Rack Locations	32
Appendix F	South to North Cross-town Trail Map	33
Appendix G	Existing & Potential Roads for Biking	34
Appendix H	Map of Wapping Park Blazed Trails	35
Appendix I	Potential route of Avery Woods Extended Trail System	36

ACKNOWLEDGEMENT

The Walking and Bicycling Master Plan is the result of the collective efforts of a group of interested citizens, walking and biking enthusiasts, town staff, and others who collaborated in the plan's development. South Windsor Walk and Wheel Ways is a sub-committee of the South Windsor Parks and Recreation Commission.

1 VISION, MISSION AND PURPOSE

1.1 Vision

The town of South Windsor will be a walking and bicycling friendly community in which residents and visitors will enjoy safe walking and bicycling for recreation and transportation.

1.2 Mission

The mission of South Windsor Walk & Wheel Ways is to create and implement a comprehensive plan to provide safe non-motorized passages for the community by expanding and linking trails to neighborhoods, public premises and open spaces within our community and to other towns.

1.3 Purpose

The purpose of this plan is to identify opportunities for multi-purpose trails and safer, more pedestrian and bicycle friendly roads throughout South Windsor. The plan also provides information for communications, education, and safety enforcement, grant applications and other fundraising efforts. The plan will be submitted to the town council for their consideration. Once the plan has been accepted by the town council, then it will be incorporated into the Town of South Windsor Parks and Recreation Commission Master Plan which in turn becomes a subset of the town's Master Plan of Conservation and Development. The plan will be reviewed annually for the first three years upon approval and updated periodically thereafter.

2 HISTORY/BACKGROUND

At a meeting on July 11, 2007, the South Windsor Parks and Recreation Commissions heard a presentation by Ginny Hole, a South Windsor resident, about the need for a more pedestrian and bicycle friendly town. The commission established a sub-committee on October 10, 2007 to begin developing multi-use trails and bicycle routes. The subcommittee held its first meeting on November 7, 2007. They chose the name South Windsor Walk & Wheel Ways (SWW&WW) and established its mission and goals. The group is comprised of interested citizens and town staff. They meet on the first Wednesday of each month to develop ideas for connecting the South Windsor community.

In the spring of 2008, SWW&WW sponsored a town-wide logo design contest. Committee members selected winners in May and recognized them on June 16, 2008 at a South Windsor Town Council meeting. During that time, the committee identified existing trail systems and promising potential trail connections; developed a site form as a tool for analyzing the potential for trail development; and completed the site reviews on the existing trails and bike routes. The committee also supported the Safe Routes to Schools Program that began at Orchard Hill Elementary School and looked at existing and potential trails leading to all the schools from nearby neighborhoods.

On June 2, 2008, the committee made a short presentation to the South Windsor Town Council to introduce themselves and inform the council of their progress and plans.

Over the summer, the committee published a brochure highlighting its mission and goals. That material will be used to promote SWW&WW's vision at local events.

In the fall of 2008, work began on writing this master plan, designing a web site linked to the town web site, and developing on-road bike routes. Work continues on mapping a route that would travel though the town center, beginning at the Chapel Road Bike Route. This route would serve as the backbone for trail connections.

3 DEFINITION OF SOUTH WINDSOR WALK & WHEEL WAYS

South Windsor - Town in Greater Hartford in Hartford County in the state of Connecticut.

Walk - Dictionary.com defines walk as "to move about or travel on foot for exercise or pleasure". Our organization defines walking as that and more. "Walk" in our name includes running, jogging, strolling, hiking, snowshoeing, and cross-country skiing. All those activities provide exercise, pleasure, or transportation.

Wheel - The dictionary definition of the wheel is "a circular frame or disk arranged to revolve on an axis, as on or in vehicles or machinery." In our group's vision, wheel can mean many non-motorized modes of wheeled transportation. Our primary focus will be bicycling but roller skating, rollerblading, and skateboarding will also be addressed. Transportation for people with disabilities, such as wheelchairs, is also important and should be considered.

Ways - Citing dictionary.com again; a way is a "passage or progress on a course". The ways of our organization are existing or new trails, paths, road shoulders, sidewalks or lanes for the use of walking and all wheeled traffic.

4 GOALS

The SWW&WW has the following goals for South Windsor:

- Maintain a walking and bicycling plan as part of the South Windsor Parks & Recreation Commission Master Plan.
- Create multi-use, off-road trails to connect neighborhoods and community sites (e.g. schools, parks, public buildings and open spaces) for recreation and transportation purposes.
- Maintain existing trails.
- Enhance existing roads to maintain a consistent and safe street-side pathway for bicyclists and pedestrians.
- Build on a regional master bikeway plan to procure funding for future multi-use trail projects and improvements.
- Link to other multi-use trail systems and road routes in neighboring communities.
- Advocate a safe walking and bicycling environment.
- Educate road users of all types on safe share-the-road practices and general safe bicycling information.
- Promote walking and bicycling options for neighborhood and community transportation.
- Establish alliances among town departments, boards and commissions, community groups and regional groups to work toward compatible goals.
- Promote the inclusion of walking and bicycling provisions in town plans for zoning, site planning, conservation and development.
- Recommend on-road routes for riding and provide bicycle and automotive signage.
- Create and implement a comprehensive plan to communicate with the public about walking and bicycling opportunities, bicycle and pedestrian safety, and the status of the master plan within the town.
- Develop communications including
 - o Newspaper articles and websites that offer resources for pedestrians and bicyclists
 - o Materials and handouts such as maps and suggested routes
 - Presentations to interested organizations
 - Updated plans and safety information
 - o Information regarding the economic benefits of multi-use trails.

5 BENEFITS OF WALKING AND BICYCLING

5.1 Recreational Benefits

Multi-use trails provide the opportunity to explore and enjoy nature by walking, bicycling, hiking, jogging, inline skating, cross country skiing, snowshoeing and related activities, such as birding, that are fun for all ages.

5.2 Benefits for Families

Multi-use trails provide great family activities for all ages. Anyone can use them. As early as age 1, a child in a stroller or on a special carrier can ride along with an adult. On multi-use trails, family members can safely enjoy the outdoors and exercise while spending time together.

5.3 Environmental Benefits / Transportation Alternative

Walking and bicycling gets a traveler to a destination without burning fossil fuels, emitting pollutants or adding to road congestion. People are looking for a lifestyle that is less car—oriented. They want to live where children can walk to school. They want trails that tie a community together, not just to use for exercise but also for transportation.

5.4 Economic Benefits

Multi-use trails and bike routes add economic value to a community. Bicycle-friendly communities attract local consumers to bicycle-accessible shopping areas. Municipalities with safe and scenic road riding and quality off-road riding attract non-residents and tourists to the community for recreation. Multi-use trails have been proven to raise the value of nearby houses.

5.5 Health Benefits

Regular physical activity is key to a healthy life-style. Regular walking, bicycling and other non-motorized activities improve personal health and wellness. Providing multi-use trails makes it easier for people to lead active, healthy lifestyles. Multi-use trails also exposes children to nature while offering them physical activity, which increases their quality of life.

5.6 Benefits for People With Disabilities

Where locations allow, multi-use trails provide recreation, health benefits, and outdoor enjoyment for people with disabilities.

6 STATUS OF WALKING AND BICYCLING IN SOUTH WINDSOR

There are very few locations on South Windsor's main transportation network that offer attractive pedestrian and bike travel routes. Many roads in South Windsor have potential pedestrian/bicycle/vehicular conflicts due to one or more of the following conditions: missing or inadequate shoulders; narrow pavement width; poor sight line; heavy traffic volumes; sharp curves; unmarked or inadequate crosswalks; and lack of sidewalks.

However, there are a number of positives. A majority of the trails in South Windsor are located in its parks or lead to schools. Since 2003, trails in South Windsor have increased:

- Boy Scout volunteers and town staff constructed walking trails in the Major Donnelly Land Preserve.
- Walking trails in Wapping Park are currently under construction by town staff and Boy Scouts volunteers. The first trail in Wapping Park trail was built in the spring of 2004.
- Rye Street Park (including the Barton Property) and Lawrence Road Park are under consideration for walking trails.

6.1 Existing Off-Road Trails Maintained by the Town of South Windsor

The Public Works Department maintains both hard and soft surface trails, primarily in the parks and neighborhoods with trail access to a public school. The town also maintains two neighborhood-to-neighborhood connections, the Desmond Duck Pond and the Little League Complex. (Please note several of the trails listed below are marked with an asterisk to indicate they require some maintenance.)

• Nevers Road Park is located on Nevers Road. The park has one large loop of trails and several smaller loops within. The park is home to the Charles N. Enes Community Center, My Friend's Place Boundless Playground, the Rotary Pavilion, the Bark Park, an outdoor volleyball court, a High & Low Ropes Course, a concession/press box building, a soccer field, two baseball fields and several cornfields.

Linear Feet: 10,239

• Major Donnelly Land Preserve is located on Sullivan Avenue. The trail system connects Sullivan Avenue to West Road. A handicapped accessible stone dust trail connects the parking lot off of Sullivan Avenue to the gazebo near the pond. The trails meander through meadows, shrub fields, hardwood forests and marsh.

Linear Feet: 5,286

• Little League Complex houses a concession building, three Little League fields, a senior league field, a softball field and two parking lots. The stone dust trail runs from the parking lot on Nevers Road to the parking lot on Ayers Road.

Linear Feet: 543

• **Desmond Duck Pond** is located on Pierce Road and has a sidewalk that runs from the parking lot to the deck overlooking the pond.

Linear Feet: 175

• Andreis Trail to Carriage Drive is a stone dust trail bordered by wooden railings. This trail also connects the Carriage Drive neighborhood to Nevers Park.

Linear Feet: 657

• Autumn Drive to Tallwood Drive is a paved trail needing a curb cut on Autumn Drive and some asphalt patching.*

Linear Feet: 50

• Pleasant Valley School to Long Hill Road is a paved trail that runs from behind Pleasant Valley School to Long Hill Road. This trail needs asphalt work.*

Linear Feet: 1,120

• Pleasant Valley School to Murielle Drive is a dirt trail from the Pleasant Valley School playground to the middle of the Murielle Drive neighborhood. Some maintenance is needed on this trail.*

Linear Feet: 400

• South Windsor Linear Park is located next to the Connecticut River at the end of Vibert Road off of Main Street. There is a small parking lot and a boat launch with walking trails along the Connecticut River.

Linear Feet: 1,100

• **Eli Terry School to Brook Street** is a paved trail located behind Eli Terry School. It crosses the Podunk River to the Brook Street neighborhood.

Linear Feet: 985

• **Graham Road to Eli Terry School** is a paved path that runs from Graham Road to the front of Eli Terry School.

Linear Feet: 625

• **Timothy Edwards Detention Basin** is a small paved path located behind Timothy Edwards Middle School.

Linear Feet: 500

• Phillip R. Smith School Woodland Trail is a dirt footpath located behind Phillp R. Smith School that leads to an open area with some benches and nature sign postings. The school uses this area as an outdoor classroom. There has been some vandalism to the nature signs. *

Linear Feet: 2,320

• Orchard Hill School to Clinton Drive is a paved trail that starts on Arnold Way next to Orchard Hill School and runs to the Clinton Drive neighborhood. A fence and a rock wall border the trail.

Linear Feet: 400 feet

• Orchard Hill School to Timothy Edwards School is a paved sidewalk running along Arnold Way from Orchard Hill School to Timothy Edwards Middle School with a side trail connecting to Clinton Drive.

Linear Feet: 1,440

• South Windsor Wildlife Sanctuary is located on Niederwerfer Road. There are walking and cross-country skiing trails and a sledding hill. The property has mixed forests, wetlands and grassy meadows. The town's environmental planner maintains it. The highest point in South Windsor is located at the top of the sledding hill, at 420 feet above sea level.

6.2 Existing Off-Road Trails Not Maintained by the Town

The South Windsor Land Conservation Trust is open to the public. The property offers walking trails that can be enjoyed throughout the year.

• South Windsor Land Conservation Trust is located on Ellington Road. The property has several trail loops, two ponds and is bounded by wetlands, power lines and the Priest Farm Property. The ponds are used for ice-skating in the winter months.

6.3 Existing On-Road Bike Routes

Chapel Road is the only road in South Windsor marked as a bike route for shared use of vehicles and bicycles. The Chapel Road Bike Route is part of the Captain John Bissell Trail, extending from Manchester to Windsor, CT. The South Windsor portion is a mainly straight route, starting at the intersection of Clark Street and Chapel Road. The bike route continues from this point heading west along a wide shouldered section of Chapel Road. It crosses Long Hill Road at a stop sign then down a hill to a traffic light on Ellington Road. The route continues on Chapel Road crossing SR 5/John Fitch Boulevard at a traffic light down a hill into the Podunk River Valley to Main Street. The Chapel Road segment is 2.4 miles. The Captain John Bissell Trail continues left onto Main Street for .5 miles and then turns right onto a paved trail to travel over the Bissell Bridge. The trail ends in Windsor at the Connecticut River Boating Access Area.

6.4 Existing Connections to Other Towns

Fortunately for South Windsor residents, the town has access to three trails that connect to several other towns. All three trails are used for walking and bicycling.

- Captain John Bissell Trail begins at the Charter Oak Greenway at the East
 Hartford/Manchester town line traveling through South Windsor and connects to Windsor
 via a separate facility, shielded from traffic, on the Bissell Bridge across the Connecticut
 River. This trail acts as a river crossing for cyclists and provides beautiful scenic views of
 the Connecticut River.
- Charter Oak Greenway is a paved trail that begins in East Hartford. It runs east from Forbes Street for 5 miles paralleling Route 384 to Gardner Street in Manchester. The Charter Oak Greenway can be accessed from South Windsor via the Captain John Bissell Trail beginning at Chapel Road.

• Vernon Rails-To-Trails is easy to get to from South Windsor by heading east on Dart Hill Road to Vernon, crossing Route 83 (Talcottville Road) and continue straight onto Regan Road to the trail entrance. This portion of the Vernon-Rails-To-Trails is part of the 4.1 mile Rockville Spur which runs from the Hop River Linear Park Trail at Warren Avenue in Vernon and heads north to the historic center of Rockville, CT.

7 SITE ASSESSMENTS

The South Windsor Walk & Wheel Ways Committee assessed 37 sites. The group designed a Site Visit Form as a tool for each member to use when analyzing a piece of property as a possible trail site. The form includes the following criteria: location, current use, surface, physical constraints, characteristics (wooded, open field, flat, hilly, etc.), structures on the property and areas surrounding the property, suitability for trails, existing and potential connections, approximate width and length of the trail, ownership and ownership restrictions, comments and priority rating.

Ratings are:

- "1" In good shape for immediate use,
- "2" Easily fixed,
- "3" Needs a lot of work, but worth pursuing,
- "4" Not usable or accessible.

Members took pictures of each property to attach to the completed form. Each property was given a code to identify the site on town GIS maps. Each site form has been logged in a notebook and will be uploaded to a web site for easier access. The log lists the code, map location, site name, site rater, rating, and comments. Refer to Appendix A for Site Visit Form.

7.1 Site Visits – Open Space

SWW&WW evaluated public open space for existing trail status and suitability for trail development. Sites were identified from the town GIS maps and assigned to committee members. They visited and photographed the locations and filled out a site visit form for each. SWW&WW combined data from the various sites and prioritized locations for trail development. Many trails already exist and just need to be designated and, in some cases, improved. Small connections from neighborhood to neighborhood, neighborhood to schools and neighborhoods to parks were highly recommended. See Appendix B for a list of Proposed Multi-use Trail Connections.

7.2 Site Visits – Power Lines

High voltage power lines pass through the town under various legal arrangements. A utility, the state, the town or a private entity may own the land. In all cases, the utility has access, usually via a dirt road, to service the lines. Where the lines pass through public lands, it may be feasible to improve these access ways for multi-use trails. Access for trails along power lines on utility or private property will require easements or formal agreements. These multi-use trails would allow safe south/north crossing through town, ultimately connecting several neighborhoods, the town center and parks. Refer to Appendix F for a map of possible cross-town multi-use trails.

7.3 Site Visits – Flood Control Projects

Flood control projects throughout the Town provide natural opportunities for trails using the tops of berms and dams. For the most part these are located on public lands and have pre-existing dirt access roads used during construction or used currently for maintenance. One such system of

dams and berms exists on the north side of Beelzebub Road. (Flood control structures on the south side of Beelzebub, while more visible from roadways, are on private property.) Refer to Appendix I for a map of a potential trail system to the west of Avery Street bounded by Beelzebub Road and Paper Chase.

7.4 Site Visits – Blazed Trails

The cost of paved or stone dust trails can be high. A realistic and economical way to increase the opportunities for recreational walking trails is by creating blazed hiking trails. These trails could also serve as relatively easy mountain bike and cross country ski trails. Blazing refers to the marking of trees along a trail. Though our ancestors would chip off a piece of bark with an ax, modern trails are marked with paint. Different colors distinguish different trails and relate to simple printed maps. There are many de facto hiking trails in the public lands in South Windsor. See Appendix H for a map of three such blazed trails located in Wapping Park. Two of them are currently works in progress.

7.5 Site Visits – Roads

Chapel Road, which is already designated as a bike route, has several sections requiring safety improvements. The suggested improvements include: "Share the Road" signs, wider shoulders, additional pedestrian push buttons (push buttons should be near the bike lane) and crosswalks at the Ellington Road and Route 5 intersections.

Main Street is a wide, quiet street that runs parallel to the Connecticut River. Vibert Road and Ferry Lane branch off of Main Street and connect to the Connecticut River. In the past, the whole length of Main Street in South Windsor was considered a bike route. SWW&WW recommends that Main Street along with Vibert Road and Ferry Lane once again be designated bike routes providing connections to Chapel Road and the Bissell Bridge.

Listed below are examples of problems in need of improvement to enhance on-road bicycling:

- 1) The main roads have narrow shoulders,
- 2) Intersections and traffic lights are not pedestrian or biker friendly,
- 3) There are obstacles in the shoulders, such as sewer grates, misplaced mailboxes and debris,
- 4) Lack of knowledge and respect for share-the-road traffic laws by both motorists and bicyclists and
- 5) Lack of roads where children can ride safely.

On road enhancements would greatly increase the safety of on-road bicycling. Specific roads that are used frequently for bicycling are identified in Appendix C. SWW&WW would like these roads to be kept in mind as retrofit projects to make the streets more suitable for bicycling. Refer to Appendix G for a map of the popular biking routes in South Windsor. Appendix D is a list of suggested on-road recreational and fitness bike routes using many of the roads mentioned in Appendix C.

7.6 General Findings

South Windsor has the following strengths for walking and bicycling:

- Support from the South Windsor Town Council to move forward on identifying off-road trail connections for walking and bicycling.
- Support from local civic groups
- Citizen support
- On-road connections to surrounding towns
- Scenic routes offering beautiful backdrops for walking and bicycling
- Initial seed money budgeted for SWW&WW projects
- Public land to provide off-road trail connections to neighborhoods, parks and schools and for a cross-town multi-use trail

7.7 Future Assessment Tools

Future assessments could employ tools such as the League of American Bicyclists' Bicycle-Friendly Community application materials and the "Bikeability Checklist" created by the National Highway Traffic Safety Administration, Pedestrian and Bicycle Information Center, and U.S. Department of Transportation. The Bicycle-Friendly Community evaluation includes a review of the following categories: engineering, education, encouragement, evaluation and planning, and enforcement. The Bikeability Checklist evaluates road-riding conditions during actual rides in the following categories: safety, surface conditions, intersection conditions, behavior of motor vehicle drivers, ease of cycling, and bicyclist behavior.

8 ALLIANCE AND COOPERATION WITH OTHER PROGRAMS

In an effort to work toward compatible goals, SWW&WW has begun to establish alliances with local town agencies and departments, civic groups and regional and state programs.

8.1 Town Agencies

Development of recreational facilities such as multi-use trails needs to be coordinated with various land use agencies and support their respective objectives. In addition SWW&WW intends to work with these agencies to promote inclusion of walking and bicycling facilities in agency rulings. The most affected boards, commissions, and task forces are:

- Parks and Recreation Commission South Windsor Walk & Wheel Ways is a subcommittee of the South Windsor Parks and Recreation Commission. The commission maintains the South Windsor Parks and Recreation Master Plan, which would benefit from objectives that this document shares. The South Windsor Walk & Wheel Ways Master Plan should be an integral component of the commission's long-term master plan.
- **Town Council** The SWW&WW Master Plan will be submitted to the South Windsor Town Council for their approval to move forward with implementing multi-use trails.
- Planning and Zoning Commission The SWW&WW Master Plan will be presented to Planning & Zoning Commission to encourage and require the inclusion of walking and bicycling facilities, to ensure that the plan meets all land use regulations, to preserve the town's quality of life, and, ultimately, to influence its Plan of Conservation and Development. Residential and commercial developers should be encouraged to incorporate walking and bicycling friendly designs in their site and subdivision plans.
- Inlands Wetlands Agency Conservation Commission The SWW&WW Master Plan will be submitted to the Inlands Wetlands Agency Conservation Commission for review to ensure nearby wetlands and rare plants are not harmed. Developers designate many areas as open space to address wetlands and poor drainage in their subdivisions. New or improved trails can be designed to complement these beautiful areas.
- Open Space Task Force The SWW&WW Master Plan will be submitted to the Open Space Task Force to ensure the proposed multi-use trails meet the guidelines of the open space they pass through.

8.2 Town Departments

SWW&WW will need to work with many of the municipal departments to develop, construct and maintain safe multi-use trails throughout the town. These departments include:

- **Recreation Department** will be able to integrate the multi-use trails and bike routes into their programming for the residents of South Windsor.
- Parks and Grounds Department will be responsible for maintaining the multi-use trails and associated amenities and assisting in construction of trails.

- Police Services Department must approve all signage and road markings. Activities that affect state roads such as road markings, shoulder lanes, signage and bike lanes are coordinated through the police department as well. Police officers will play an important role in educating motorists and cyclists.
- **Public Works Department** will maintain the street shoulders for bicycling and install signage for bicycle safety.
- Engineering Department will be needed for the design of the multi-use trails.
- **Planning Department** staff has been instrumental for providing maps and identifying feasible locations for multi-use trails.
- **Board of Education** adopted the Safe Routes to School Program. A Safe Routes Program determines why students do not walk or bike to school and develops strategies to change the culture or the environment. Linking neighborhoods to schools via trails will make it possible for children to walk and bike to school safely.

8.3 Local Civic Groups

Local organizations can participate in many SWW&WW service projects, such as clearing trails, building bridges, boardwalks, signs, railings and benches; creating and distributing maps; organizing a bicycle safety campaign, posting information signs, landscaping and planting, purchasing and installing bike racks; performing cleanup events, and promoting a bike ride or walk. The involvement of community organizations would greatly contribute to South Windsor Walk & Wheel Ways' goals.

8.4 Regional And State Programs

Members of the SWW&WW have joined or attended the various programs at the regional and state level that advocate walking and bicycling as an alternative mode of transportation. These programs offer support and assistance for developing off-road trails and promote upcoming walking and bicycling events. Working with these groups ensures that South Windsor's efforts are consistent with regional and state efforts.

- Central Connecticut Bicycle Alliance (CCBA) The CCBA's mission is to promote bicycling and human powered transportation as environmentally friendly, healthy, and economical forms of transportation and recreation, to improve the bicycling environment and the quality of life in the Central Connecticut Region, and to educate motor vehicle operators and bicyclists about their respective rights and responsibilities.
- Greenways The Connecticut Greenways Council's duties include advising and
 assisting in the coordination of state agencies, municipalities, regional planning
 organizations and private citizens in voluntarily planning and implementing a system of
 greenways; providing technical assistance to state agencies, municipalities, regional
 planning organizations and private citizens in planning, designing and implementing
 greenways, including advice on securing state, federal and nongovernmental grants; and
 establishing criteria for designation of greenways.

- Capitol Region Council of Governments (CRCOG) In April 2008, the Capitol Region Council of Governments issued a "Regional Pedestrian and Bicycle Plan," which shows existing and proposed trails and on-road networks throughout the region, including South Windsor. CRCOG is also encouraging towns to adopt the concept of Complete Streets. A Complete Street is one that has safe access for all users, whether on foot, on bike, or in a car. On July 1, 2009, Governor Rell signed into law the complete streets policy to improve bicycle and pedestrian access.
- The Connecticut Forest and Park Association (CFPA) The CFPA is introducing the WalkCT program, an initiative that will establish an online clearinghouse of information on walking routes and bring access to the outdoors to every household in Connecticut. The CFPA website is www.WalkCT.org, and was launched in spring of 2009.
- Connecticut Trails Fund Advisory Group (CTF) The CTF, established by the Capitol Region Council of Governments and Connecticut Forest and Park Association, seeks "completion of a connected system of trails and improvements in both walk-ability and bike-ability in the capitol region." It intends "to strengthen existing organizations, speed the building of non-motorized trails, and generally increase the pace of moving from "trail plans" to "on-the-ground" trails."

9 FUNDING SOURCES

Additional funds are needed to achieve the goals and recommendations outlined in the master plan and to realize the vision of making South Windsor a "bicycle and pedestrian friendly community". Funding could come from a variety of sources including:

- Local government A small percentage of local transportation funds should be designated for pedestrian and bicycle facilities, such as pedestrian and bicycle paths and lanes.
- **State government** Grants may be available through The Connecticut Bikeway Grant Program for bikeways and multiuse paths. The Connecticut Greenways Small Grants Program is another source for grants.
- **Federal government**: Resources for state and federal grants include the Recreational Trails Program, TEA-21, SAFETEA-LU grant program, and Safe Routes to School Grant Program.
- **Voluntary** Voluntary sources including grants from the recently organized "Regional Trails Fund", private foundations, corporations, local civic clubs and groups, and, individual donations. To the extent possible, appropriations made by local government will be leveraged to solicit grants from the state and federal government. Efforts to identify other potential sources of state and/or federal assistance are ongoing.

The goals of the master plan are multifaceted and speak to issues of health and wellness, safety, accessibility, and use of the bicycle for recreation, as well as transportation. Partnerships with other agencies and groups with shared or common objectives should be pursued to secure funding for common goals.

The South Windsor Community Foundation has agreed to serve as the fiduciary for fundraising efforts related to the development of the SWW&WW Master Plan. Donations can be made to the South Windsor Community Foundation, Inc. at P.O. Box 1341, South Windsor, CT 06074 or through its web site: www.swfoundation.org.

Another strategy is the use of in-kind services in the form of donated labor, equipment, materials or services.

10 COMMUNICATIONS

South Windsor Walk & Wheel Ways will provide regular communications on project progress to the public and town agencies and departments.

- Publications and Presentations will keep the general public informed on progress, upcoming events, and need for multi-use trails and road improvements. The purpose of this plan is to make South Windsor residents aware of the project's progress and opportunities to participate at various stages. The communication will be through articles in the local newspapers and on the South Windsor municipal web site. There also may be presentations to various groups and residents that are interested in the project.
- Educational materials will address the needs of pedestrians, bicyclists and motorist to
 educate individuals about safe road sharing practices. Materials may include road signs,
 trail signage, maps, kiosks, newspaper articles, curriculum for driver education courses,
 public school materials, discussions with the South Windsor Police Department, and
 pamphlets for distribution at bicycle shops and town offices.
- Progress Reports will be provided to the Planning Department, Environmental/Conservation Department, town council and other relevant boards and commissions, such as the Planning and Zoning Commission, Conservation Commission, Open Space Task Force, Parks and Recreation Commission, and smart growth groups. The purpose of these reports is to keep regulatory and other town agencies regularly informed in case they need to act on our proposals. Communications will include many of SWW&WW's activities and project's progress.

11 POLICY, PLANNING AND IMPLEMENTATION PROJECTS AND IMPROVEMENTS

11.1 Policy and Planning

The success of any plan requires the creation and implementation of municipal policies and procedures to support the plan. Minimally, policies related to the following topics should be included:

- Include a representative from the SWW&WW to collaborate with town officials and commissions on activities that affect walking and bicycling, including a process to ensure that such consultation would occur.
- Adopt the Complete Streets Program as an engineering standard/practice and implement as feasible, particularly during new road construction and repaving. Refer to Section 8.4 for a description of the program under CRCOG.
- Protect and enhance off-road trails in collaboration with town policymakers and staff.
- Include sidewalks, safe passages for bicyclists and, where possible, off-road trails in all new commercial and residential developments.
- Create a mechanism for residents to report problems or maintenance issues with off-road trails and bike routes.
- Include bicycle and pedestrian friendly design and facilities whenever either the town or state undertakes major road reconstruction projects. Funding for these requirements should be included in the project's budget.
- Seek opportunities to connect South Windsor trails and routes to on-road and off-road trails in other towns. Ideally, we would like to attach the proposed cross-town multi-use trail route to the Captain John Bissell Trail. Refer to Appendix F for a map of the connection of the cross-town multi-use trail route.

11.2 Engineering Planning and Design

The utility and safety for walking and bicycling on all South Windsor roads should be considered during all new road construction and during all planned road renovations and re-paving. The following engineering policies should be included in this consideration:

- Potential changes to the width of travel lanes
- Sidewalks
- Increased and uniform widths of shoulders
- Use of pavement markings to designate travel patterns and lane/shoulder sizes
- Inclusion of formal bike lanes on designated roads as space allows
- Use of bicycle-friendly grates on all new and reconstructed catch basins
- Frequent street sweeping of roads that have a chip sealed surface treatment.

• Install bicycle route and/or other appropriate signage on roadways that constitute scenic rides or primary bicycle transportation routes to select destinations.

11.3 Off-Road Projects

One of the stated goals of this plan is to create multi-purpose, off-road trails in order to provide walking and/or biking to other neighborhoods and community sites. Listed below are some suggested off-road trails.

South to North Cross-Town Trail

The recommended cross-town trail will allow safe south to north travel across town from the intersection of Chapel Road and Clark Street to Miller Road. Refer to Appendix F for a map of the proposed route. Beginning at Clark Street between Margaret Drive and Pleasant Valley Road,, the cross-town trail will travel along the power lines to Wapping Park. The trail will exit at the Wapping Park parking lot on Clark Street and proceed to the intersection of Clark Street and Ellington Road passing the South Windsor Post Office main branch. At this point, the trail will turn both ways onto Ellington Road. The left portion will take a right onto Pierce Road and link up to the Major Michael Donnelly Preserve. The right portion will travel to the intersection of Sullivan Avenue and Buckland Road. This connection to the center of town will provide residents safe walking and bicycling access to shops, services, and restaurants. The trail will then proceed left onto Sullivan Avenue passing the South Windsor Public Library and the Town Hall to Route 74. The trail will turn right onto Route 74 and pick up Sand Hill Road to Nevers Road Park via Chief Ryan Way. One can then either walk or ride the trails in Nevers Road Park or continue to Andreis Trail to the beautiful neighborhood connection between Andreis Trail and Carriage Drive to the power lines and follow them north to Miller Road.

Ideally, the trails providing transportation, such as the cross-town trail, will be hard surfaces to provide safe off-road routes for commuters, walkers, bicycle tourists and individuals who use wheelchairs. If that is not feasible, many parts of the cross-town trail could be a stone dust surface, which is suitable for hybrid and mountain bikes as well as for walking and running.

Shorter Off-Road Trails

The smaller recommended off-road trail connections referenced in Appendix B are either trails connecting neighborhoods to neighborhoods, neighborhoods to schools, or neighborhoods to shops. The last connection listed provides easy access from Route 5 to Main Street, which is a popular street for bicycling. Many of these trails already exist as a dirt path and just need to be leveled out, widened, landscaped, and filled in with stone dust. Two trails require some major clearing and will have to be leveled and filled in with stone dust.

Existing Trails

SWW&WW identified four existing trails in need of maintenance. Those trails are listed in Section 6.1 and identified with an asterisk. Two trails are located at Pleasant Valley Elementary School. One is a dirt path that needs to be leveled out to provide safer access from Pleasant Valley School to Murielle Drive. The other trail (connecting to Long Hill Road) is paved but in disrepair. The neighborhood connection between Autumn Drive and Tallwood Drive needs some asphalt patching and a curb cut. Lastly, the dirt path located behind Phillip R. Smith

School leads to an open space and is used as an outdoor classroom. This trail has been vandalized.

Trail Signage

SWW&WW also plans to design a trail signage plan. The plan would identify where signs are needed on the off-road trails. Each sign will be identified by our logo along with symbols indicating the type of trail access such as a bike (mountain, hybrid, road), wheelchair, rollerblade or hiking boot for walking. Mile markers, length of trail and difficulty of trail would be included as well.

11.4 On-Road Projects

The Chapel Road Bike Route is SWW&WW first priority for on-road improvements since it already is designated as a bike route and is a cross-town connection between Manchester and Windsor. Refer to Section 7.5 for suggested improvements to the Chapel Road Bike Route.

SWW&WW has also identified a network of streets that will allow bicyclists to ride within South Windsor and will link to several towns. Some of the streets are already comfortable for bicycling. Others need improvements. See Appendix C for a list of roads designated as popular roads for biking in South Windsor as well as Appendix G for a map of these roads. As these roads come up for reconstruction or repaving, town officials should consider thepolicy and engineering requirements lised in sections 11.1 and 11.2.

11.5 Bike Racks

Bike racks should be located at all public buildings and sites, including schools, parks, and municipal buildings, as well as at commercial buildings throughout town. Bike racks serve a dual purpose. They provide places for bike commuters to safely store their bikes and they encourage others to consider bicycling for transportation. Recommended bike rack locations are listed in Appendix E.

After receiving clearance from the Parks and Recreation Commission, SWW&WW Committee purchased its first portable 5-Hoop Rail Bike Rack. The rack has a laser cut plate of the SWW&WW logo at one end and the other end is available for future sponsorship opportunities. Appendix E has an illustration of the bike rack. The bike rack was purchased through Dero Bike Rack at www.dero.com.

11.6 Share the Road Signs

SWW&WW intends to promote installation of "Share the Road" warning signs in South Windsor. The purpose of warning signs is to alert road users to specific conditions or hazards, which may require special attention by motorists. A blanket posting of more general messages tends to degrade their effectiveness. According to the Manual on Uniform Traffic Control Devices, (MUTCD), "Share the Road" signs may be used in conjunction with bicycle symbol warning signs where needed to warn motorists to watch for bicyclists. The Department of Transportation prefers to install such signs at specific locations where a particular need can be demonstrated. SWW&WW will work with the South Windsor Police Department to determine where there is a need for these signs.

11.7 Safety Education/Enforcement

SWW&WW proposes the creation and implementation of a pedestrian and bicycle safety program throughout South Windsor. Education efforts should include general safe riding practices, including helmet safety and laws related to sharing the road with motor vehicles. A variety of resources exist to assist in this education program. On the local level, collaborations with town bike shops can provide an integral part of the education process. Programs within the schools should be encouraged as well. Other resources include the League of American Bicyclists, which provides a bicycle safety curriculum, and the Central Connecticut Bicycle Alliance (CCBA).

The South Windsor Police Department will be essential for the education and enforcement of safety issues related to bicycles. All police officers should be trained in the laws related to bicycling on the roads so that they can effectively educate bicyclists and motorists and, as necessary, enforce safe and legal practices of both bicyclists and motor vehicle drivers.

12 REFERENCES

- 1. "Regional Pedestrian and Bicycle Plan The CRCOG Commitment to a Walkable Bikeable Region," Capitol Region Council of Governments, April 2008, Website: www.crcog.org/
- 2. South Windsor Planning Department, September, 1987
- 3. South Windsor Plan of Conservation and Development Draft
- 4. League of American Bicyclists Bicycle Friendly Community, Website: www.bikeleague.org/programs/bicyclefriendlyamerica/communities/
- 5. Connecticut Department of Environment Protection Connecticut Greenways Council, Website: www.ct.gov/dep/cwp/view.asp?a=2707&q=323856&depNav GID=1704
- 6. Bikeability Checklist U.S. Department of Transportation/National Highway Traffic Safety Administration Website: www.nhtsa.dot.gov/people/injury/pedbimot/bike/bikeability/
- 7. Connecticut Trails Fund Advisory Group (CTF)
- 8. Connecticut Statewide Bicycle & Pedestrian Transportation Plan, Draft 2009. Website: www.ctbikepedplan.org
- 9. Central Connecticut Bicycle Alliance (CCBA), Website: www.wecyclect.org
- 10. Glastonbury Bikeways Master Plan
- 11. West Hartford Master Plan

APPENDIX A SITE VISIT FORM

South Windsor Walk & W	heel Ways Site Visit Form
Photo(s) taken: Yes (attached) / No	Date:
Your Name:	
Location	
(include code: Purple,1. G4)	
Current Use: Park, Power Lines, Open S	pace, Easement, Other
Surface: (paved, dirt, grass, rocky)	
Physical Constraints: (water, seasonal access,	woods, brush, etc.)
Characteristics: (wooded, open field, flat, hilly)	
List any structures on the property?	
What surrounds the property? (Parking lot, bac	kyard, school, etc.)
What is the property suitable for as you see it n mountain bike, wheelchair, rollerblading)	ow? (Walking, running, road bike, hybrid bike,
Existing & Potential Connections:	
Approximate width & length of trail (if applicable	e):
Other Comments:	
Ownership & Ownership Constraints: (Add late	r)
Priority Rating: (1=good shape, usable immedia worth it, 4= don't bother)	ately, 2=easy fix, 3=needs a lot of work, but well

APPENDIX B PROPOSED MULTI-USE TRAIL CONNECTIONS

- 1. **Abbe Road Extension to Nevers Road Park** Currently a dirt path with some large roots. Recommend the path be leveled and filled in with stone dust to match the rest of the park paths.
- 2. **Skyline Drive to Norma Road and Greenfield Drive** Currently a flat established dirt path with some branches and brush. Recommend adding stone dust and railings to the trail so that the same appearance is similar to the Andreis Trail.
- 3. **Smith Street to Buckland Road** Currently an uphill dirt trail. Recommend this trail be paved for pedestrian and bicycle access from surrounding neighborhoods.
- 4. Smith Street to Rockville Bank Courtyard in the Promenade Shops at Evergreen Walk Recommend a gradually sloped paved path for pedestrian and bicycle access from surrounding neighborhoods.
- 5. **Green Lane to Gordon Drive** Currently a dirt path and a great connection between neighborhoods. This path needs stone dust.
- 6. Kupchunos Drive to Scott Drive Currently a dirt path and a great connection between the two neighborhoods. Recommend curb cuts at both ends of the path and stone dust.
- 7. High Ridge Road to Timothy Edwards School Recommend a paved path from High Ridge Road to the paved path that already exists behind Timothy Edwards School and a connector to the existing path along Arnold Way. This connection would provide access for this neighborhood to both Orchard Hill and Timothy Edwards Middle Schools.
- 8. Spinners Run to Natsisky Farm Road At the end of Spinner Run is a short wellworn dirt path to Natsisky Farm Road. Recommend stone dust. This trail provides easy access to Lawrence Road Park from the Natsisky Farm Neighborhood.
- 9. Beelzebub Road to Flood Control Dam and Open Space Property A trail network starting at Beelzebub Road heading north to the flood control dam with connections to Kent Lane, Fairview Road, Avery Street, Cadbury Road, and Paper Chase. Currently these are dirt footpaths to all these locations. They all provide neighborhood access to Phillip R. Smith School.
- 10. Oak Street to Dogwood Lane A wooded dirt path from Dogwood Lane through open space property to the Oak Street basketball court.
- 11. Jacque Lane to Pleasant Valley Road A small connection exists from Jacque Lane to open space property. Recommend continuing the trail through the woods to connect to the parcel under the power lines and to Pleasant Valley Road. This would be a great connection for this neighborhood to the proposed cross-town bike trail and to Wapping Park.
- 12. Main Street to Route 5 Small path connection from the north end of Main Street to Route 5 heading towards East Windsor. Provides easy access to bikers coming from East Windsor on Route 5 to Main Street.

APPENDIX C ROAD IMPROVEMENTS

- 1. Clark Street
- 2. Ellington Road: From the Ellington border to Chapel Road
- 3. Oakland Road
- 4. Sullivan Avenue
- 5. Strong Road: From Route 5 to Sullivan Avenue
- 6. Avery Street: From Dart Hill Road to Woodland Drive
- 7. Graham Road
- 8. Nevers Road
- 9. All roads around schools in town
- 10. Sand Hill Road From Sullivan to Nevers Road
- 11. West Street From Strong Road to Sullivan Avenue
- 12. Pierce Road
- 13. Dart Hill Road
- 14. Rye Street Sullivan Avenue to Griffin Road
- 15. Griffin Road From Rye Street to the East Windsor border
- 16. Neiderwerfer Road
- 17. Miller Road
- 18. Troy Road
- 19. Brookfield Street
- 20. Deming Street From Ellington Road to Buckland Road
- 21. Kelly Road from Vernon border to Oak Street
- 22. Oak Street from Kelly Road to Woodland Drive
- 23. Woodland Drive
- 24. Barber Hill Road
- 25. Abbe Road
- 26. Miller Road
- 27. Smith Road
- 28. Windsorville Road

APPENDIX D SAMPLE ON-ROAD RECREATIONAL AND FITNESS BIKE ROUTES

12 Mile Bike Loop:

Begin on Chapel Road, turn left on Clark Street, turn left on Ellington Road, turn right on Pierce Road, turn left on Sullivan Ave., cross Route 5, turn left on Main Street and finish with a left on Chapel Road.

10.5 Mile Bike Loop:

Begin on Chapel Road, turn left on Clark Street, turn left on Ellington Road, turn right on Pierce Road, turn left on Strong Road, cross Route 5 and continue on Strong Road, turn left on Main Street and finish with a left on Chapel Road.

9.25 Mile Bike Loop:

Begin on Main Street at Strong Road. Ride up Strong Road, cross Route 5, continue on Strong Road, turn left on West Road, turn right on Sullivan Avenue, turn left on Hillside Drive, turn left on Skyline Drive, and turn left on the path to Norma Road. Follow Norma Road to Farmstead and turn left on Farmstead, then take a quick right onto Overlook Road, ride to the end of Overlook and cross Brook Street to the path to Eli Terry School. The path will take you across a river to the backside of the school. Ride through the grass on the left side of the school to the front. Bear left out of the parking lot to Griffin Road. Turn left on Griffin Road, turn left on Brookfield Street, turn right onto Troy Road, turn left onto Rye Street, turn right onto Commerce Way, turn right onto Sullivan Ave., cross Route 5 to bring you back to Main Street and finish at Strong Road.

18.75 Mile Bike Loop (More Difficult):

Begin on Chapel Road, turn right on Main Street, turn right onto Sullivan Avenue, left on Rye Street, right on Griffin Road, right on Graham Road and then bear left onto Nevers Road, left on Miller Road, cross Ellington Road to Dart Hill Road, follow Dart Hill Road to Avery Street, turn right on Avery Street, turn right onto Orchard Hill Drive, left on Foster Street, cross Route 30 to Slater Street, turn right on Deming Street, cross Buckland Road to continue on Deming Street, turn left on Clark Street and finish with a right on Chapel Road.

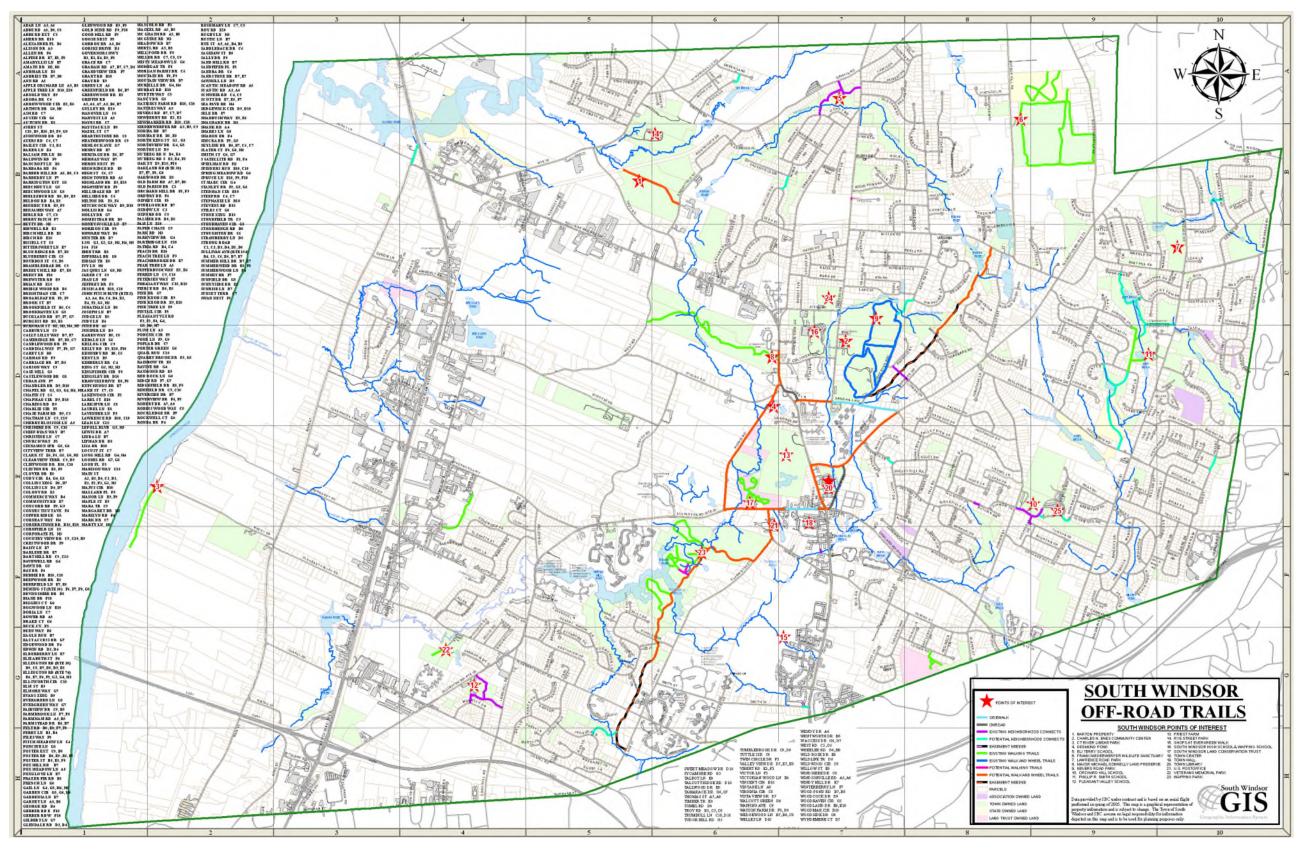
APPENDIX E SUGGESTED BIKE RACK LOCATIONS

- South Windsor Public Library
- Wood Memorial Library
- South Windsor Town Hall
- South Windsor Police Department
- South Windsor High School
- Timothy Edwards Middle School
- All Elementary Schools
- South Windsor Community Center
- Nevers Road Park
- Wapping Park
- Rye Street Park
- Major Michael Donnelly Land Preserve
- Desmond Duck Pond
- Veterans Memorial Park
- Town Center Plaza
- Evergreen Walk Shoppes
- Little League Complex
- Frank Niederwerfer Wildlife Sanctuary

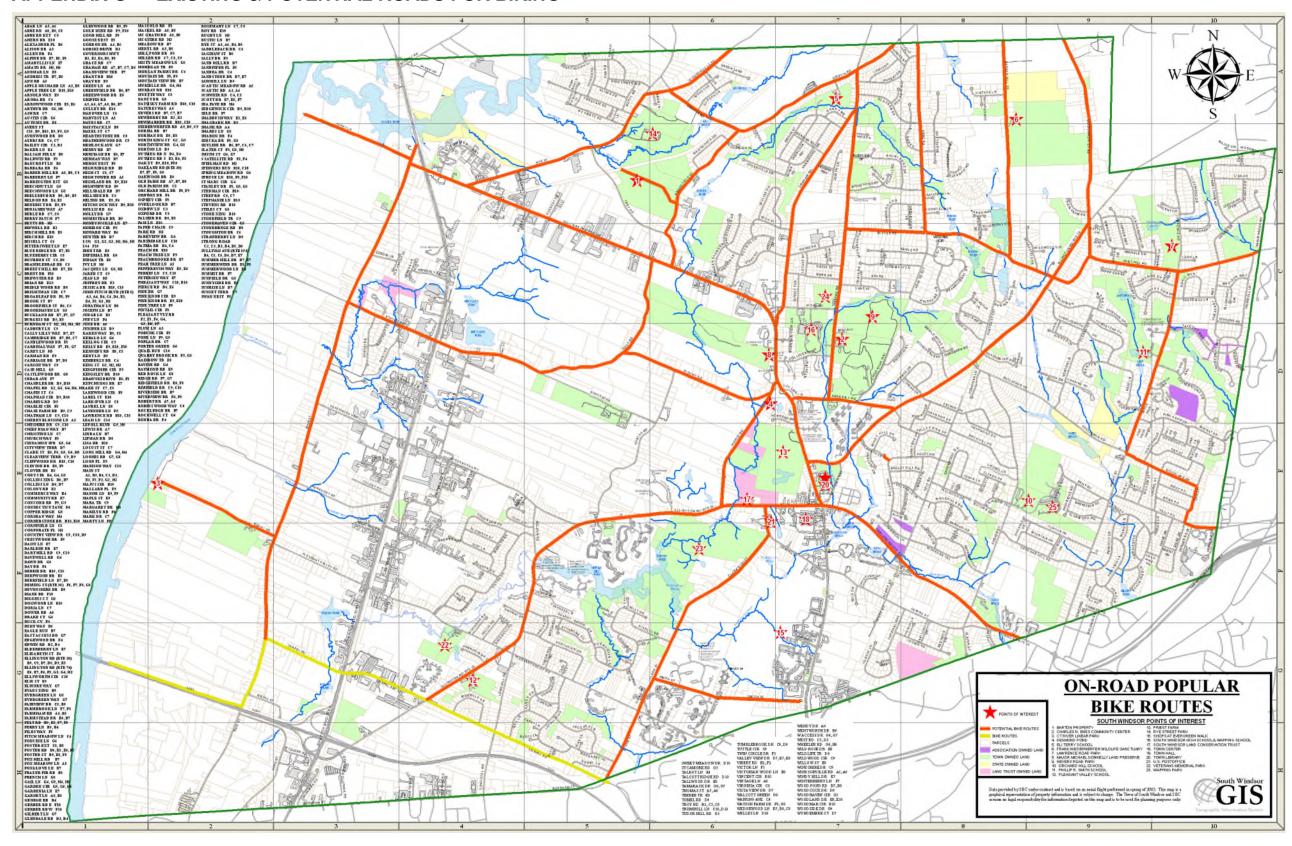
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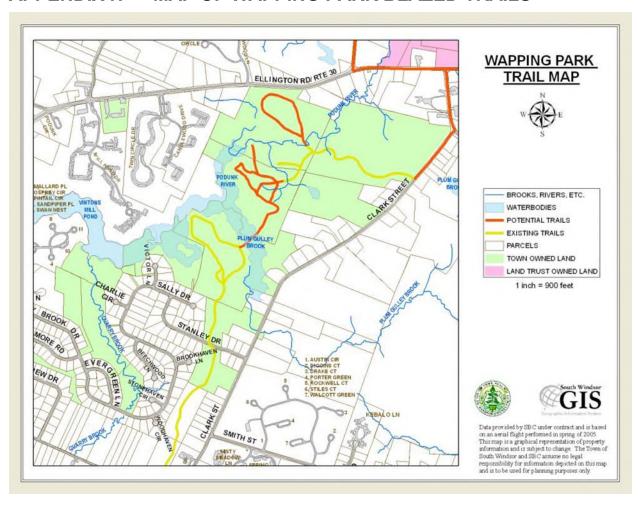
APPENDIX F SOUTH TO NORTH CROSS-TOWN TRAIL MAP



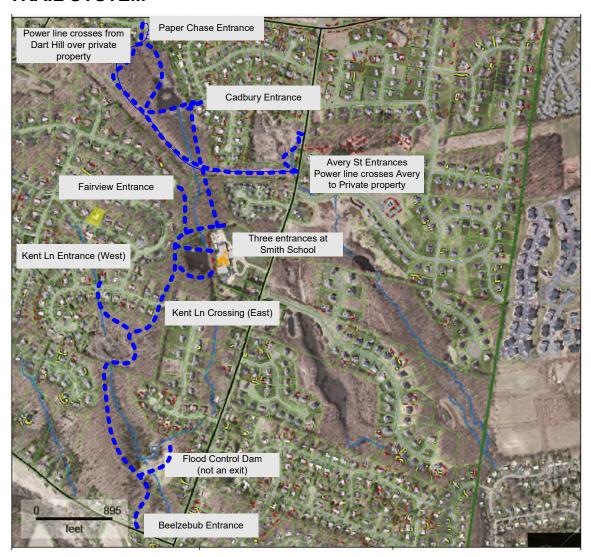
APPENDIX G EXISTING & POTENTIAL ROADS FOR BIKING



APPENDIX H MAP OF WAPPING PARK BLAZED TRAILS



APPENDIX I POTENTIAL ROUTE OF AVERY WOODS EXTENDED TRAIL SYSTEM



Notes: Lines are not drawn precisely. Paths reflecting casual use exist in most areas, but trails would have to be cut just north of Smith School, just south of the eastern Kent Lane crossing and at some of the street entrances. Other trails would require upgrades, creek crossings, etc. Good sidewalks exist to connect hikers from the Paper Chase entrance to Lawrence Road Park (not shown).