



Middletown

Complete Streets Master Plan

FINAL DRAFT

03/11/13

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1 ACKNOWLEDGEMENTS

Support from the Middletown Common Council and Mayor Daniel Drew has been instrumental in the creation of this Plan. The Complete Streets Planning Committee was formed in December 2011 as a temporary committee to the Common Council.

Council Appointed Members

Elizabeth Emery	Cindy Perugini
John Hall	Debbie Stanely
Ron Krom	Amy Vaillancourt

At-Large Community Members

Patrice Barrett	Howard Reid
Pam Frost	Betty Riedinger
Jane Harris	Al Santostefano
Jennifer Kleindienst	Kate TenEyck
Midge Malicki	Mark A. Thompson
Florence Oehl	Kate Wolfe

The City contracted Kent + Frost Landscape Architecture (K+F) of Mystic, CT in September 2012 to prepare a Complete Streets Master Plan. The plan was completed in March 2013.

The Committee worked closely with K+F in development of the Plan. Members accompanied K+F on the two case study visits to Northampton and South Windsor.

Northampton, MA planning Director, Wayne Feiden gave us insight into the process of community transformation and project management. MassBike Chapter President, James Lowenthal described the essential role of citizen advocacy. Northampton businessman and trail advocate Craig Dell Penna gave us a complete history of the movement to save and repurpose abandoned railroad right of ways in Massachusetts and the value of rail-trails to the economic vitality of the city.

South Windsor Walk and Wheel Ways Co-Chair Ginny Hole displayed indefatigable energy and was very generous and helpful to our group. South Windsor Schools Community Resource Coordinator Cindi Yakoubian explained the successful Safe Routes to School program. South Windsor Parks & Recreation Director Ray Favreau explained how his department supports the work of the committee. The entire SW Walk & Wheel Ways committee welcomed our group with advice and encouragement.

The Complete Streets Guidelines chapter was adapted with permission from the *Model Comprehensive Plan Language on Complete Streets* by the National Policy & Legal Analysis Network to Prevent Childhood Obesity (NPLAN), a project of Public Health Law & Policy (PHLP).

2 VISION, MISSION & PURPOSE

2.1 Vision Statement

Transportation improvements in Middletown will be designed and constructed according to Complete Streets guidelines to encourage safe driving, walking, bicycling, and transit for all users.

2.2 Mission

The mission of the Complete Streets Committee is to encourage biking, walking and transit on Middletown streets. The Committee will work to facilitate walking and biking connections between neighborhoods, commercial districts, parks, public lands, private institutions, and neighboring communities.

2.3 Purpose

The purpose of this plan is to provide a framework for implementation of transportation policy that incorporates Complete Streets principles on both City and State right of ways in the City of Middletown. The plan establishes the need for change, identifies opportunities, and provides a comprehensive policy for Complete Street implementation.

The Middletown Complete Streets Plan will encourage the development of a complete streets network throughout the community to create a more balanced transportation system. The Complete Streets Plan will be consistent with, and assist in achieving the goals and recommendations set forth in the Middletown Plan of Conservation and Development and other policy documents. The Plan will ensure that new and updated public and private projects are planned, designed, maintained and operated to enable safe, comfortable and convenient travel to the greatest extent possible for users of all ages and abilities including pedestrians, bicyclists, motorists and transit riders.

The Plan will be submitted to the City's Common Council for their consideration. Upon acceptance, it will be incorporated into the City's Plan of Conservation and Development.

3 HISTORY & BACKGROUND

3.1 Complete Streets in Connecticut

Connecticut passed a Complete Streets law in 2009:



STATE OF CONNECTICUT
EXECUTIVE CHAMBERS
HARTFORD, CONNECTICUT 06106
M. JODI RELL
GOVERNOR

FOR IMMEDIATE RELEASE
July 4, 2009

Governor Rell Signs Bill Aimed at Boosting Bicycle, Pedestrian Access

Governor M. Jodi Rell today announced she has signed into law a bill intended to improve access for pedestrians and bicyclists by directing 1 percent of future highway and street funds to such purposes and establishing an advisory board to work with the Governor, the Department of Transportation and the Legislature in the future.

Under the bill, beginning October 1, 2010, a minimum of 1 percent of the total funds received by the DOT or Connecticut municipality in any fiscal year for street and highway construction, restoration, rehabilitation or relocation must be spent to provide facilities for “all users” – including bikeways and sidewalks with curb cuts or ramps.

The law makes exceptions for resurfacing and for emergency repairs and other special situations, such as roads where non-motorized use is prohibited or the costs of “all-user” accommodations would be prohibitive.

“Walking and bicycling are more than healthy lifestyle choices – for many Connecticut commuters, they are the way to get to work,” Governor Rell said. “We want to encourage that, not only because it’s good for personal fitness but because it removes congestion from our highways and pollutants – including greenhouse gases – from our skies. The bill also dovetails neatly with my Administration’s emphasis on smart growth and transit-oriented development, which calls for communities that make it easier for people to get to work, home and shopping without having to drive.

“In addition, this bill creates a new, 11-member panel to ensure that the focus on ‘all-user’ transportation options continues to be a priority,” the Governor said. “The panel will promote programs and facilities that encourage alternatives to driving and help the state develop the best ways to promote this important option.”

Under the bill, the DOT will also be required to report – once by October 1, 2009, and again by October 1, 2010 – on state- or federally funded projects that have been undertaken that contain bicycle and pedestrian access.

The new law – Senate Bill 735, *An Act Improving Bicycle and Pedestrian Access* – takes effect July 1. (Source: the M. Jodi Rell Archived Website)

3.2 Middletown Common Council Resolution



RESOLUTION No. 75-12

WHEREAS, the Common Council is fully committed to developing a master plan bike and pedestrian plan for the city of Middletown; and

WHEREAS, the Common Council is committed with working with the Jonah Center for Earth and Art to convene a group of walking and bicycling advocates to work on this plan; and

WHEREAS, the Committee will be temporary in nature and may be created under Chapter 14, Article XVI, Sections 14-49 through 14-53; and

WHEREAS, the charge of this committee is to develop a long-term plan for infrastructure improvements, including bike lanes, sidewalks, and multi-use trails and increase educational programs that promote safe walking and bicycling activity within the City; and

WHEREAS, the committee is asked to consider the value of walking and bicycling from multiple perspectives including public safety, public health, transportation for residents of all ages and income levels, recreational needs of residents and their abilities, and connecting residential neighborhoods with commercial areas, schools and services; and

WHEREAS, the committee will recommend and prioritize the infrastructure improvements that facilitate safe and frequent walking and cycling routes and to look at the broader perspective of connecting local area towns and membership may include residents of area towns; and

WHEREAS, the Complete Streets Planning Committee may from time to time form subcommittees of interested public members who can add knowledge and experience in developing this master plan.

NOW, THEREFORE, BE IT RESOLVED BY THE COMMON COUNCIL OF THE CITY OF MIDDLETOWN: That it approves the creation of the **Complete Streets Planning Committee**, to consist of no more than 15 members.

Submitted by: Councilman Thomas J. Serra
Councilman Philip J. Pessina

Status: APPROVED
by Common Council, City of Middletown
at its meeting held on: MARCH 5, 2012

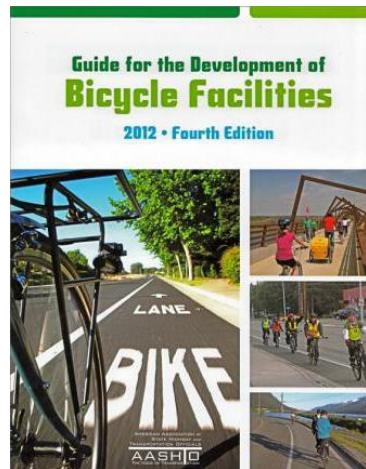
3.3 Principal Issues

One of the Committee's first activities was development of a list of issues specific to Middletown:

- Safety concern – including research into where accidents are most frequent)
- Traffic volume – existing route patterns and usage (including bike and pedestrian counts)
- Access to schools and parks
- Location of high-density and lower-income housing
- Budgets for construction and maintenance
- Connections between downtown and other population & business centers
- Benefits of identifying specific recreational biking and walking areas to attract visitors
- Bike theft and secure parking/storage
- Public involvement and education
- Needed or useful zoning and ordinance changes to propose
- Funding opportunities and Bicycling-Pedestrian Awareness organizations
- Political support and buy-in through advisory council
- Enforcement of laws concerning safe driving, walking and bicycling



Safety of walkers and bicyclists is a priority



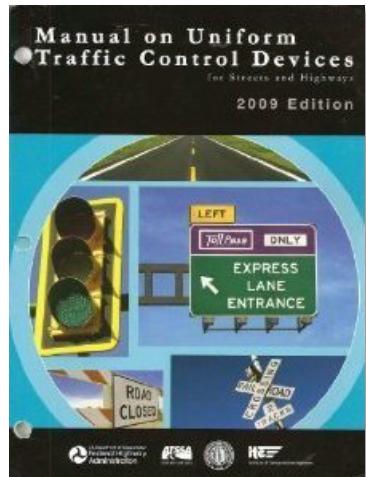
3.4 Standards

Complete streets projects involve overlapping regulations, engineering, planning and construction trades. All recommendations explicitly and implicitly named in this Plan conform to the following reference standards and requirements:

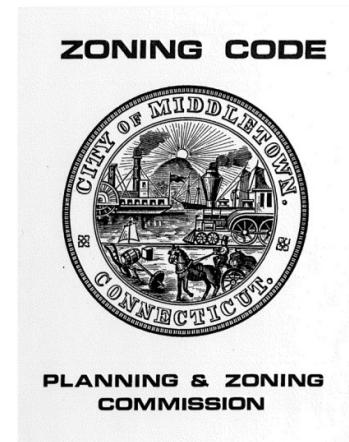
- American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets, 6th Edition, 2011* (The Green Book)
- AASHTO *Guide for the Development of Bicycle Facilities, 4th Edition, 2012*
- U. S. Dept of Transportation, *Manual on Uniform Traffic Control Devices (MUTCD), 2009*
- National Association of City Transportation Officials (NACTO), *Urban Bikeway Design Guide, 2nd edition, 2012*
- AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, 1st Edition
- Americans with Disabilities Act (ADA) *2010 Standards for Accessible Design*

4 GOALS

1. Encourage the incorporation of this Complete Streets policy into planning, engineering and maintenance of municipal streets.



2. Build relationships between City departments, boards and commissions, community groups and regional organizations to facilitate better mobility for bicyclists, pedestrians and transit users.
3. Work with the Middletown School System to implement a Safe Routes to School Program.
4. Initiate and support a sustainable educational program that informs drivers, walkers and bicyclists about the importance of safe share the road practices.
5. Advocate for the updating of municipal regulations like zoning and subdivision in order to better accommodate Complete Streets guidelines and bike and walking connections between developments.
6. Identify and prioritize bike commuter routes.
7. Extend and expand existing multiuse trails to connect important destinations like schools, neighborhoods, and employment centers.
8. Link to bikeways and trails in neighboring towns.
9. Collect baseline data and regularly gather follow-up data in order to assess impact of policies.
10. Advocate throughout the community for safe and convenient biking, walking and transit facilities. Develop communications including:
 - An organization website
 - Social networking like Facebook, Twitter
 - Print and electronic media news articles and press releases
 - Presentations to interested organizations
 - Letters of support from community stakeholdersParticipate in events:
 - Organize fun, themed events that include bicycling and walking activities
 - Participate in various community events like festivals, fairs
 - Create a public information kit including table, tent, signs and printed materials that can be easily transported and assembled at community events



5 BENEFITS OF COMPLETE STREETS

5.1 Safety

A Complete Street improves safety by reducing crashes through changes that discourage excessive speed, separates pedestrians from travel lanes, dedicates space for safe bicycling, and fosters mutual respect between motorists, walkers (including elderly and handicapped) and bicyclists. Facilities that improve safety on a Complete Street can include sidewalks, bike lanes, share-the-road signage, ADA accessible crosswalks and ramps, refuge



Source: Complete Streets Coalition

medians, bus pullouts, raised crosswalks, audible pedestrian signals, and sidewalk bulb-outs.

5.2 Efficiency

Complete Streets increase the overall capacity and efficiency of transportation networks by diversifying the share of trips from overwhelmingly vehicular to a more balanced distribution of driving, walking, biking and transit.

5.3 Health

Complete Streets encourage healthy lifestyles by making physical activity a natural part of a daily routine. Short trips by foot or bike can easily satisfy the CDC Physical Activity Guidelines for 30 minutes a day of physical activity. There is a growing recognition that the places where people live, work, learn, play and shop affect community health. Community health can also be enhanced when streets are designed to filter and absorb rainwater runoff through a variety of low impact practices like permeable pavements, bioswales and rain gardens. Landscaping can be employed where space allows improving both the natural and visual environment the street. Tree lined streets, especially where trees occupy a buffer strip between travel lanes and sidewalks are more comfortable and compelling for all users.

5.4 Children

Complete Streets are good for kids. Streets that provide room for bicycling and walking help children get physical activity and gain independence. More children walk to school where there are sidewalks, and children who have and use safe routes have a more positive view of their neighborhood. Safe Routes to School programs will benefit from Complete Streets policies.

5.5 Economics

Complete Streets make economic sense. A balanced transportation system can bolster economic growth and stability by providing accessible and efficient connections between residences, schools, parks, public transportation, offices, and retail destinations. Complete Streets that are planned from the beginning do not cost more than incomplete streets. Incomplete streets should be improved gradually as scheduled maintenance and safety upgrades take place.

5.6 Community

The Complete Streets approach acknowledges that the transportation system determines not only how people move from place to place, but also defines the fundamental aesthetics, character and identity of

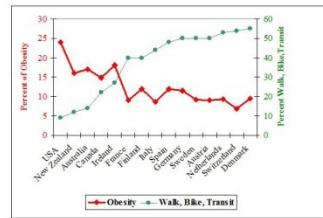


"More than 40% of pedestrian deaths in 2007 & 2008 occurred where no crosswalk was available."

Source: Complete Streets Coalition

Benefits: Health

Obesity is lower in places where people use bicycles, public transportation, and their feet.



Pucher, "Walking and Cycling: Path to Improved Public Health," Ft City Conference, NYC, June 2009

Source: Complete Streets Coalition

Benefits: Lower Costs

Americans spent 18 cents of every dollar on transportation

The poorest fifth of families spend more than double that figure.

Complete Streets give people more control over their expenses, replacing expensive car travel with cheaper options like walking, riding bikes, and taking public transportation.



Source: Complete Streets Coalition

a community. The public right-of-ways that contain streets are by far the most heavily used public spaces in a community. This space is a reflection of a community's everyday life that is expressed in how people get around, where they causally meet other people, where they shop, and how physically active they are. In cities like Northampton, MA high numbers of pedestrians and bicyclists help support a community of healthy local businesses. Complete Streets contribute to enhanced community best when adjoining land uses are regulated by policies that acknowledge and contribute to the most desirable street characteristics.

6 CURRENT CONDITIONS IN MIDDLETOWN

6.1 Safety

Walking Safety: Pedestrians are unable to walk safely along many streets outside the Middletown central business district and newer subdivisions. Sidewalks exist within neighborhoods constructed under the current subdivision regulations but older neighborhoods like South Farms do not contain sidewalks on many streets. Short trips that could be made by walking are not a realistic option for most residents and visitors because the existing sidewalk network does not typically extend onto collector and arterial roads where most trip destinations are located. Transit use is unattractive for many Middletown residents because many stops are not connected to sidewalks or include shelters. Roads like Newfield, Saybrook, Randolph, and East St. are unsafe for pedestrians because of a lack of sidewalks, crosswalks, and pedestrian crossing signals, (Westlake, Smith, and Middle St. are exceptions due to the multiuse path). School children are unable to walk to many schools safely due to a lack of sidewalks and multiuse paths. Some streets contain excessively wide travel lanes that can encourage speeding. Crashes between vehicles and pedestrians are statistically more likely on streets without sidewalks and pedestrians are more likely to suffer serious injury or death especially where speed limits are greater than 25 mph. Roads without sidewalks are especially dangerous for pedestrians after dark.

Bicycling Safety: There are no bike-specific accommodations on Middletown streets. On roads with low speed limits (25 mph or less) and low traffic volumes (fewer than 3,000 cars/day), bikes and motor vehicles can safely share lanes. Roads with higher speed limits and traffic volumes place bicyclists at greater risk of collisions with motor vehicles unless facilities and accommodations like bike lanes and signage are provided. Some roads may be suitable for lane narrowing and establishment of wider shoulders or dedicated bike lanes. State DOT policy was changed in 2010 to encourage the restriping of state routes with 11' wide lanes in order to accommodate safer bicycling



"Complete streets create more choices, shorten travel times, and encourage less carbon-intensive transportation."

Source: Complete Streets Coalition



Saybrook Rd and Coe Ave. There are no safe options for pedestrians.

Photo source: Bing Images/Microsoft Corp.



Certain Middletown streets may serve as "bicycle boulevards" that accommodate bike commuters and local auto traffic. Ridge Rd. (shown above) connects Randolph Rd. to the edge of downtown.

Photo source: Bing Images/Microsoft Corp.

among other benefits. Bikes are considered vehicles under Connecticut state law (Sec. 14-286a) and have the right to operate on streets except where their operation is prohibited (e.g. limited access highways like Route 9). State law requires that a driver of a vehicle overtaking a bicyclist allow at least 3 feet separation (PA 08-101). Bicyclists are also required by state law to obey traffic laws, to signal turns, and to wear lights and reflectors when riding after dark. Middletown Area Transit busses are equipped with transport bike racks but bus stops are not designed to facilitate bike use (curb ramps, shelters).

6.2 Efficiency

The shifting of trips from motor vehicle to walking, bicycling and transit can have a beneficial effect on the efficiency of the Middletown road network. Communities with mature bike and pedestrian programs have seen reductions of vehicle traffic on urban commuter routes and commercial districts. Downtown Middletown could benefit from a greater mode shift to bikes, walking and transit. The upcoming multiuse trail linking Main Street to Wesleyan University and Wesleyan Hills will reduce vehicle trips between these destinations. Completion of the Westlake/Trolley trail into the North End and downtown would have a similar impact. Other streets could experience reductions in traffic volume if safe and efficient pedestrian, bike and transit facilities are developed.

6.3 Health

Short walking and biking trips will improve the health of Middletown residents. The factors that influence a person's decision to walk or bike rely on the existence of convenient, safe facilities and variables like weather, distance, and the landscape/land use character along the route. More people will walk along urban streets with mixed uses and visual variety. Routes along arterial roads with isolated buildings, large setbacks and parking lots are far less appealing. Bicycling trips are subject to similar variables with the addition of the person's riding skill and fitness. Serious bike commuters want to get to their destination as quickly as possible and will ride on streets that novice riders shun. Multiuse trails that traverse open space are a viable alternative that can provide connectivity and encourage healthy activity. The existing Westlake/Trolley trail serves principally as a recreation path but has the potential to become an important commuter route if extended south to the North End and downtown. Complete Streets will allow better mobility and active living for elderly and handicapped residents.

6.4 Children

Inactivity among Middletown children reflects a nationwide problem. The share of school children that walk and bike to school has steadily



Bike Walk Connecticut advocates for safer accommodations on Connecticut roads.



Downtown Middletown could benefit from a greater mode shift to bikes, walking and transit.

Photo source: Bing Images/Microsoft Corp.



More Middletown students would walk or bike to school if there were safer facilities and "safe biking" curriculums.

declined over the last four decades in correlation with the enforcement of Euclidean zoning codes that have separated land uses and created the unintended consequence of isolating the non driving population (primarily children), making them dependent on chauffeured vehicles. The lack of sidewalks connecting neighborhoods to schools and parks has exacerbated this problem. Many Middletown schools can benefit from the Safe Routes to School philosophy and the outcomes it encourages.

6.5 Economics

The success of Middletown's Main Street has much to do with the "walkability" of the downtown. Better accommodation of bicycling will also be good for business. Communities with a high degree of walking and biking are regarded by many measures as highly desirable places to live and work. By expanding the sidewalk network, accommodating bicycles on streets and paths throughout the city, and implementing smart growth principles, Middletown can improve and sustain its economic health.



The success of Middletown's Main Street has much to do with the "walkability" of the downtown.
Photo source: Wikipedia

6.6 Community

Middletown reflects a land use pattern typical of many American communities – the historic downtown was built according to common sense traditions that dictated the relationship between buildings and streets. These traditions responded to a slower pace and human scale. Motor vehicle circulation and parking requirements were not a factor. Other parts of the city were developed later according to the requirements (with advantages and disadvantages) of motor vehicles. The result is that the downtown has a stronger sense of place and community than outlying areas. The process of Complete Streets development will allow for more social interaction between neighbors by enabling more walking, biking and transit use. It will improve the image of a safe, friendly and attractive community.



Residents of walkable communities are more likely to be socially engaged, and report being in good health and happy more often.

Source: Shannon H. Rogers, et al. Applied Research in Quality of Life (2010)

7 CASE STUDY REPORTS

7.1 Northampton, MA Case Study Visit 10/26/12

The trip to Northampton last Friday was very informative. Our group visited with Northampton's Planning Director, Wayne Feiden, the MASS Bike regional chapter president, James Lowenthal, and local businessman Craig Della Penna.

Northampton has similarities to Middletown such as geography - urban center located on the CT River and I-91 corridor, college presence, and dense commercial/residential mix.

It has dissimilarities - the concentration of colleges, known as the



"Five College Consortium" includes 2,200 faculty and 30,000 students in the immediate area. Also, the legacy of Northampton as a regional railway hub has enabled development of a "spoke and hub" rail-trail system that has strongly influenced the movement towards multi-modal development.

Another important difference is in how bike/ped improvements are funded. Unlike Connecticut, Massachusetts allows municipalities to impose Development Impact Fees on new developments.

Northampton uses a formula based on specific traffic impacts to derive funds that can be used for bike/ped improvements in the immediate vicinity of the new development. The program collects an average of \$150,000 per year. 90% of the funds are used for bike/ped improvements. A Transportation and Parking Commission composed of department heads (Planning, DPW, Parking, Police, Health) reps from City Council, Planning Board, and citizen meets monthly to set transportation policy, advance projects and distribute impact (and other) funds to authorized projects.

A grant funded bike rack program has installed approximately 100 inverted "u" shaped racks in the CBD. Lack of space on CBD sidewalks has limited expansion of the rack program.

Northampton city government has been very proactive in the development of a community-wide transportation plan and its implementation. The city was one of a small number with "shovel ready" projects that qualified for recent federal stimulus funds. Two large bike/ped projects will start construction in Spring 2013 because of this proactive approach. Excepting the rail-trails, most of the local projects have involved striping for bike lanes, bike racks, signage, and pedestrian safety measures.

All the people we spoke to referred to the "cultural shift" that has occurred over the last 10 years or so. A growing acceptance of the importance of biking and walking has led to a cooperative spirit among stakeholders and between drivers, bicyclists and pedestrians. Anecdotal evidence indicates that people are moving to the area at least in part because of this cultural orientation. Our last appointment was with Craig Della Penna, owner of "Trailside Realty". His successful business caters to clients seeking this particular quality of life. Craig led us on a bike tour some of the rail-trails. At mid afternoon the trails were very busy with all sorts of people including lots of school kids on their way home from school.

The only regret we heard was that the program had been oriented strongly towards bike/ped improvements and hadn't taken sufficiently into account other elements of "complete streets" such as landscaping, lighting, drainage and other street functions.



Norwottuck Rail Trail Bridge over Main Street



Trails connect neighborhoods, schools and businesses



Bike Lane through Downtown

Lastly, our discussion in Northampton touched on the importance of a good working relationship between the city's stakeholders and the state DOT.

7.2 South Windsor, CT Case Study Visit 12/05/12

The trip to South Windsor was informative and inspiring. The town received League of American Bicyclists Bronze level Bike Friendly Community status in 2012. A subcommittee of the Parks & Recreation Commission named South Windsor Walk & Wheel Ways (SWW&WW) celebrated its fifth anniversary last month. It is composed of approximately a dozen members and is co-chaired by Ginny Hole and Rob O'Connor. The P&R director, Ray Favreau, attends all meetings and serves as an advisor. P&R staff has been very active in the implementation of programs and events, including the installation and transportation of bike racks, construction of small trail improvements and maintenance. The P&R department allocates a small annual appropriation to support the work of the committee.

The committee meets monthly and is very active as an advocate for biking and walking initiatives. They organize numerous free events throughout the year. Funding comes mostly through grants and donations. P&R contributes a small amount through its capital improvements budget. A principal supporter is the South Windsor Community Foundation, Inc. Donations to SWW&WW can be made to the Foundation and are tax deductible. Here is the foundation's mission statement:

The South Windsor Community Foundation, Inc., seeks to improve the quality of life in South Windsor for all residents of all ages by furthering the development of community based programs and projects. The South Windsor Community Foundation, Inc., is operating exclusively for educational and charitable purposes, and to make distributions to organizations that qualify as exempt organizations under Section 501(c)(3).

We started with a tour led by Ginny and committee member Ken Seck. We visited Orchard Hill Elementary School where an \$800k Safe Routes to School grant has been implemented. The sidewalks surrounding the school have been extended with improved street crossings. A new paved trail connects to the adjacent Middle School and continues to a neighboring cul-de-sac. New bike racks have been installed. The result of these improvements is that students from surrounding neighborhoods can now safely walk or bike to school on sidewalks and paths. According to our guides, a



Safe Routes to School Project under construction



Sidewalk improvements in surrounding neighborhoods

noticeable increase in walking and biking has been apparent. The construction work is still underway.

Next, we drove to see some of the other facilities improvements around town. These include paved trail connections between adjacent cul-de-sacs, bike lane stencils on town roads with wide enough shoulders, bike lane signs, share the road signs, and Bike Friendly Community signs. We also saw where the bike/ped path over the CT River on the Bissell Bridge lands on Main Street.

Our next stop was the S Windsor Public Schools office where we met with Cindi Yakoubian, Community Resource Coordinator. Cindi has been instrumental in organizing and coordinating the establishment of an elementary education curriculum for bike safety. She worked in close coordination with the Capital Region Council of Governments to prepare the Safe Routes to School (SRS) grant application. The grant application checklist had extensive requirements including parent surveys, an engineering assessment, and confirmation of a K-5 health curriculum among others. The SRS initiative began with one parent approaching a P.E. teacher with concerns about student's lack of physical activity in their daily routines and snowballed from there. It was obvious that Cindi's ability to devote time and energy to the project was essential to the school district's success.

Our last stop was the SWW&WW meeting. This is a group of highly motivated people who are clearly energized by their organization's success. The discussion of their story was led by Ginny, Ray, and Rob. A central thread was that the town government supports their efforts and that cooperation between Planning, P&R, DPW and Police is essential to the progress they have made. Besides working on facilities like bike lanes, paths and sidewalks, the group is focused on staging fun, free events that promote SWW&WW. The goal is to attract residents to bike, walk and run events that are family friendly and have educational value. By spreading the word about their organization and its mission, SWW&WW is cultivating support for current and larger future initiatives.

Elected town officials are also big supporters. SWW&WW went to Town Council for endorsement of their Master Plan in 2010. Their pitch was that the program is beneficial to the town in many ways and that they were a sustainable volunteer organization that didn't require any town funding. This was obviously an appealing message. Since then, they have begun to receive a small amount of town funding and service through P&R, but they have earned it through a record of successful activities.

A current issue underway is adoption of a sidewalk ordinance that enables the town to construct sidewalks in developed areas where



Trails connect neighborhoods and schools



Program success is a source of community pride and volunteerism

Photo source: Town of South Windsor



none currently exist. Issues of maintenance and repair responsibility have been overcome.

The meeting then continued with regular business that included proposals for new facilities, ideas for future events and reports on dialogue with land owners that have approached the committee with interest in granting trail access.

8 FUNDING SOURCES

8.1 Local Government

Capital Improvement Plan. If approved by the Common Council, some Complete Streets projects may be funded through the City's CIP.

Referendum approved Road, Sidewalk and Public Works Facilities Improvement Program.

\$14,170,000 in bonds was approved in 2011 with 5,505 votes in favor and 1,655 votes against it, indicating substantial support for the program. Previous road bonds were approved in 2001, 2003, 2005 and 2007.

8.2 State Government

The Connecticut Department of Transportation improves state routes through four programs:

1. **Pavement Preservation Program.** Typically involves milling, resurfacing and striping of the existing roadway. New striping can create the opportunity for narrowed travel lanes (11' is the new state standard) and other bike/pedestrian friendly measures. Projects are scheduled on an annual basis.
2. **Vendor-in-Place (VIP) Program.** Projects that involve more work than typical resurfacing and are bid and awarded to private construction companies.
3. **Safety Improvements.** State route intersections can be upgraded through the Highway Safety Improvement Program (HSIP). This can include improvement of sight lines, ADA compliance upgrades, crosswalks, signage, actuated pedestrian crossing signals and other traffic control equipment.
4. **Reconstruction Projects.** Projects are included in the CT DOT's five year Capital Plan. These projects include a minimum 18 month design review process. According to the CT DOT FFY 2012-2016 Capital Plan currently funded Middletown projects include bridge replacement on Route 17 over Long Hill Brook, and West Street bridge replacement over the P&W railroad.

8.3 Federal Government

Transportation Alternatives Program (TAP). The Transportation Alternatives Program (TAP) authorized under Section 1122 of MAP-21 provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for the planning, design or construction of boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

The current program is named Moving Ahead Progress for the 21st Century Act. MAP-21 is a 2-year surface transportation bill. It provides level funding for federal highway, transit and safety programs through September, 2014.

Although the new legislation was signed into law during the summer of 2012, the bulk of MAP-21 provisions did not go into effect until October, 2012. Staff at the Connecticut Department of Transportation (CTDOT) is in the process of reviewing the Act as well as Federal guidance to determine program implications. Updates and guidance from CTDOT regarding MAP-21 program implications will be made available on the DOT website.

General protocol will still require that projects can become eligible to receive funding if nominated by the regional planning organization (Lower Connecticut River Valley Council of Governments is Middletown's RPO).

Recreational Trails Program (RTP). MAP-21 reauthorized the RTP through Federal fiscal years 2013 and 2014 as a set-aside from the new Transportation Alternatives Program. RTP provides funds to the States to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. The RTP is an assistance program of the Department of Transportation's Federal Highway Administration (FHWA). Federal transportation funds benefit recreation including hiking, bicycling, in-line skating, equestrian use, cross-country skiing, and off-road motorized vehicles. The CT DEEP administers the program. Grants typically are limited to \$150,000 per project per year.

Other federal programs:

Congestion Mitigation and Air Quality Improvement Program (Dept. of Transportation). Provides funds to the states for projects that reduce transportation-related air pollution.

America's Historic Places Grants (National Endowment for the Humanities). Provides funding for public programs related to the interpretation of historic sites such as driving or walking trails or tours, signs, and publications, that address themes central to American history. (non-construction).

Community Development Block Grants (Dept. of Housing and Urban Development). Awards block grants to rural and urban communities for economic development. Cultural and historic programs may be eligible.

Access to Artistic Excellence Grants (National Endowment for the Arts). Supports projects that provide access to the arts for all Americans. Public art and streetscape improvements may be eligible.

Centers for Disease Control. The CDC has funded programs to enhance "Active Living" and publishes physical activity guidelines that support Complete Streets policies.

8.4 Private Sources

Robert Wood Johnson Foundation. RWJF awards grants that affect changes to the physical environment that improve health through active living.

Bikes Belong Coalition. Community Partnership Grants are designed to foster and support partnerships between city or county governments, non-profit organizations, and local businesses and to improve the environment for bicycling in the community. Grants will primarily fund the construction or expansion of bicycle facilities such as bike lanes, trails, and paths as well as advocacy projects that promote bicycling as a safe and accessible mode of transportation.

Local Foundations and philanthropic organizations. Rotary Clubs, local foundations, and corporate grants are all sources that should be investigated for Complete Street funding.

Note: Grant programs are constantly changing. The above list is not intended as a definitive resource, but rather as a general reference that can guide a more detailed funding search by City staff and committee members.

9 COMPLETE STREETS GUIDELINES

The following guideline is divided into five sections:

- **Transportation (T)**
- **Land Use (LU)**
- **Schools/Public Facilities (S)**
- **Parks/Recreation (P)**

9.1 TRANSPORTATION

Goal T1: Provide safe and comfortable routes for walking, bicycling, and public transportation to increase use of these modes of transportation, enable convenient and active travel as part of daily activities, reduce pollution, and meet the needs of all users of the streets, including children, families, older adults, and people with disabilities.

Objective T1.1: Integrate Complete Streets infrastructure and design features into street design and construction

Action T1.1.1. In Planning, Designing, and Constructing Complete Streets:

- Include infrastructure that promotes a safe means of travel for all users along the right of way.
- Include infrastructure that facilitates safe crossing of the right of way.
- Ensure that sidewalks, crosswalks, public transportation stops and facilities, and other aspects of the transportation right of way are compliant with the Americans with Disabilities Act.
- Prioritize incorporation of street design features and techniques that promote safe and comfortable travel by pedestrians, bicyclists, and public transportation riders, and physical buffers and separations between vehicular traffic and other users.
- Ensure use of additional features that improve the comfort and safety of users:
 - Provide pedestrian-oriented signs, lighting, street furniture, bicycle parking facilities, and comfortable transit facilities.
 - Encourage street trees, landscaping, and planting strips.
 - Reduce surface water runoff.

Action T1.1.2. In all street projects, include infrastructure that improves transportation options for pedestrians, bicyclists, and public transportation riders of all ages and abilities:

- Ensure that this infrastructure is included in planning, design, approval, construction, operations, and maintenance phases of street projects.
- Incorporate this infrastructure into all construction, reconstruction, retrofit, maintenance, alteration, and repair of streets, bridges, and other portions of the transportation network.
- Incorporate multimodal improvements into pavement resurfacing, restriping, and signalization operations where the safety and convenience of users can be improved within the scope of the work.
- Allow exclusion of such infrastructure from street projects only upon approval by the Common Council or its designee, and only with specific documentation and supporting data.

Action T1.1.3. Develop policies and tools to improve Middletown's Complete Streets practices:

- Develop policies to improve the safety of crossings and travel in the vicinity of schools and parks.
- Develop a Complete Streets checklist for Middletown's development and redevelopment projects. The checklist may also be included in applications before the Land Use Boards for the review of private development projects. The Complete Streets Committee or its successor, in conjunction with the Planning Office and Land Use Boards, will develop the checklist.

Action T1.1.4. Change transportation investment criteria to ensure that existing transportation funds are available for Complete Streets infrastructure.

Action T1.1.5. Identify additional funding streams and implementation strategies to retrofit existing streets to include Complete Streets infrastructure.

Objective T1.2: Make Complete Streets practices a routine part of Middletown's everyday operations.

Action T1.2.1. As necessary, restructure and revise the zoning , subdivision regulations, and other related regulations in order to accommodate the needs of all users in all street projects on public [and private] streets.

Action T1.2.2. Develop or revise municipal street standards and design manuals to ensure that standards support and do not impede Complete Streets

- Assess current requirements with regard to road width and turning radii in order to determine the narrowest vehicle lane width and tightest corner radii that safely balance other needs.

Action T1.2.3. Make training available to planning and public works personnel on the importance of Complete Streets and on implementation and integration of multimodal infrastructure and techniques.

Action T1.2.4. Encourage coordination among agencies and departments to develop joint prioritization, capital planning and programming, and implementation of street improvement projects and programs.

Action T1.2.5. Encourage targeted outreach and public participation in community decisions concerning street design and use.

Action T1.2.6. By 2015, collect baseline data and regularly gather follow-up data in order to assess impact of policies.

- Collect data regarding the safety, functionality, and actual use by each category of users of the neighborhoods and areas within Middletown.
- Track public transportation ridership numbers.
- Track performance standards and goals.
- Track other performance measures such as number of new curb ramps and new street trees or plantings.
- Request that major employers monitor how employees commute to work.

Action T1.2.8. Establish performance standards with measurable outcomes to assess safety, functionality, and actual use by each category of users; include goals such as:

- By [determine a realistic date], facilitate a transportation mode shift so that [determine a realistic goal %] of trips occur by bicycling or walking.
- By [determine a realistic date], reduce the number of injuries and fatalities to bicyclists and pedestrians by [determine a realistic goal %].
- Reduce per capita vehicle miles traveled by [determine a realistic goal %] by [determine a realistic date].
- Provide a high proportion of streets [determine a realistic goal %] with sidewalks, low design speeds, tree canopy, and street furnishings.
- Increase the miles of bicycle lanes and other bikeways by [determine a realistic goal %] by [determine a realistic date].
- Increase the miles of sidewalks by [determine a realistic goal %] by [determine a realistic date]

Objective T1.3: Plan and develop a comprehensive and convenient bicycle and pedestrian transportation network.

Action T1.3.1. Develop a long-term plan for a bicycle and pedestrian network that meets the needs of users, including pedestrians, bicyclists, public transportation riders, and people of all ages and abilities, including children, youth, families, older adults, and individuals with disabilities.

- For each category of user, map out a preferred transportation network with routes that will enable safe, interconnected, direct, continuous, and efficient travel from each major origination area to each major destination area.
- Encourage public participation in community decisions concerning the preferred route network, street design and use to ensure that such decisions result in streets that meet the needs of all users
- Identify and prioritize necessary changes in order to implement the preferred network
- Explore the use of non-standard locations and connections for bicycle, pedestrian, and public transportation facilities, such as easements, restored stream corridors, and railroad rights-of-way.

Action T1.3.2. Evaluate timeline and funding of the plan.

- Assess the degree to which implementation of the plan can be coordinated with planned reconstruction of streets, development projects, utility projects, and other existing funding streams.
- Develop funding strategies for addressing additional needs; actively pursue funding from state, federal, and other sources.
- Explore imposing dedication requirements on new development to create paths and other Complete Streets infrastructure.

Action T1.3.3. In collaboration with the Lower Connecticut River Valley Planning Region, integrate bicycle, pedestrian, and public transportation facility planning into regional and local transportation planning programs and agencies to encourage connectivity between jurisdictions.

Action T1.3.4. In collaboration with the Connecticut Department of Transportation, integrate Complete Streets planning into the routine preservation cycle, intersection upgrades, Vendor in Place projects, and Reconstruction projects.

Action T1.3.5. Develop programs to encourage bicycle use, such as enacting indoor bicycle parking policies to encourage bicycle commuting, or testing innovative bicycle facility design.

Objective T1.4: Promote bicycle, pedestrian and public transportation rider safety.

Action T1.4.1. Identify physical improvements that would make bicycle and pedestrian travel safer along current major bicycling and walking routes and the proposed future network, prioritizing routes to and from schools.

Action T1.4.2. Identify safety improvements to pedestrian and bicycle routes used to access public transportation stops; collaborate with Middletown Area Transit to relocate stops where advisable.

Action T1.4.3. Identify intersections and other locations where collisions have occurred or that present safety challenges for pedestrians, bicyclists, or other users; consider gathering additional data through methods such as walkability/bikeability audits; analyze data; and develop solutions to safety issues.

Action T1.4.4. Prioritize modifications to the identified locations and identify funding streams and implementation strategies, including which features can be constructed as part of routine street projects.

Action T1.4.5. Collaborate with schools, senior centers, advocacy groups, and public safety departments to provide community education about safe travel for pedestrians, bicyclists, public transportation riders, and others.

Action T1.4.6. Use crime prevention through environmental design strategies to increase safety for pedestrians, bicyclists, and other users.

Action T1.4.7. As necessary, public safety departments should engage in additional enforcement actions in strategic locations.

Objective T1.5: Make public transportation an interconnected part of the transportation network.

Action T1.5.1. Partner with Middletown Area Transit to enhance and expand public transportation services and infrastructure throughout Middletown and the surrounding region.

Action T1.5.2. Work jointly with Middletown Area Transit to provide destinations and activities that can be reached by public transportation and are of interest to public transportation dependent populations, including youth, older adults, and people with disabilities.

Action T1.5.3. Collaborate with Middletown Area Transit to incorporate infrastructure to assist users in employing multiple means of transportation in a single trip in order to increase transportation access and flexibility; examples include, but are not limited to, provisions for bicycle access on public transportation, and secure bicycle racks at transit stops.

Action T1.5.4. Ensure safe and accessible pedestrian routes to public transportation stops; relocate stops if safe routes are not feasible at current location.

Action T1.5.5. Work with Middletown Area Transit to ensure that public transportation facilities and vehicles are fully accessible to people with disabilities.

Action T1.5.6. Partner with Middletown Are Transit to collect data and establish performance standards related to these steps.

9.2 LAND USE

Goal LU1: Ensure that land use patterns and decisions encourage walking, bicycling, and public transportation use, and make these transportation options a safe and convenient choice.

Objective LU1.1: Plan, design, and create complete and well-structured neighborhoods whose physical layout and land use mix promote walking, bicycling, and public transportation use.

Action LU1.1.1. Encourage mixed-use development to allow siting of residential, retail, office, recreational, and educational facilities within close proximity to each other to encourage walking and bicycling as a routine part of everyday life.

- Maximize the proportion of residences within [¼] mile of uses like parks, schools, grocers, retailers, service providers, employment, public transportation, and other desirable community features.

Action LU1.1.2. Promote infill development and redevelopment; new construction should occur in a compact form in developed locations whenever feasible.

Action LU1.1.3. Encourage the creation of high-quality community plazas, squares, greens commons, community and neighborhood parks.

Action LU1.1.4. Require safe and convenient walking, bicycling, and public transportation features in new or renovated development.

Action LU1.1.5. Explore imposing development impact fee, use fee, and dedication requirements on new development to fund multimodal transportation.

Objective LU1.2: Require street design that creates public space that is safe and welcoming for pedestrians.

Action LU1.2.1. Encourage street-oriented buildings; locate parking lots, if provided, in rear of retail and business centers.

Action LU1.2.2. Provide pedestrian-scale lighting.

Action LU1.2.3. Encourage a high proportion of streets where building façades have abundant windows and entrances facing the street and create a human-scaled building wall near the lot line (aka ROW line).

Action LU1.2.4. Encourage ground-level business uses that support pedestrian activity, such as retail, restaurants, and services.

Action LU1.2.5. Reduce the proportion of street frontages and rights of way lined by parking lots, blank walls, or empty lots.

Action LU1.2.6. Where parking lots are located between commercial buildings and streets, require or encourage creation of a pedestrian path from the street to the entrance.

Action LU1.2.7. Increase street connectivity.

9.3 SCHOOLS/PUBLIC FACILITIES

Goal S1: Increase children's physical activity to benefit their short- and long-term health and improve their ability to learn.

Objective S1.1: Provide children with safe and appealing opportunities for walking and bicycling to school in order to decrease rush hour traffic and fossil fuel consumption, encourage exercise and healthy living habits in children, and reduce the risk of injury to children through traffic collisions near schools.

Action S1.1.1. Support Safe Routes to Schools programs.

- Work with Middletown School District to pursue encouragement programs such as Walk and Bike to School Days, as well as "Walking School Bus" programs at elementary schools.
- Gather baseline data on attitudes about and levels of walking and bicycling to school, through student tallies and parent surveys.

- Work with Middletown School District and advocates to obtain Safe Routes to School funding.
- Work with Middletown School District to encourage educational programs that teach students safe walking and bicycling behaviors, and educate parents and drivers in the community about the importance of safe driving.
- Work with law enforcement to enforce speed limits and traffic laws, assist in ensuring safe crossings, and promote safe travel behavior within the schools.
- Encourage parents to get children to school through active travel such as walking or bicycling.

Action S1.1.2 Prioritize safety and roadway improvements around schools.

- Conduct walkability and bikeability audits along routes to schools to identify opportunities and needs for infrastructure improvements.
- Ensure that speed limits in areas within [1,000 feet] of schools are no greater than 25 miles per hour.
- Assess traffic speeds, volumes, and vehicle types around schools; implement traffic calming in areas immediately around schools where indicated by speed and volume.
- Pursue Safe Routes to School funding to implement infrastructure improvements.

Action S1.1.3. Work with Middletown School District to improve transportation safety around schools, including drop-off and pickup zones, as well as locations where interactions occur between pedestrians, bicyclists, automobiles, and buses.

Action S1.1.4. Work with Middletown School District to locate and design new and remodeled schools to be easily accessible by foot or bicycle for the largest number of students possible by taking steps such as providing safe and secure bicycle parking within school facilities, and allowing convenient access to schools from public streets.

Action S1.1.5. Locate sports fields near schools, or pursue joint use agreements with Middletown School District to allow school fields to be available for public use outside of school hours.

9.4 PARKS/RECREATION

Goal P1: Increase use of parks and open space for physical activity and encourage residents to access parks by walking, bicycling, or public transportation.

Objective P1.1: Create safe routes to parks and open space.

Action P1.1.1. Encourage the development of parks and open space with a network of safe and convenient walking and bicycle routes, including routes that access other popular destinations, such as schools.

Action P1.1.2. Implement traffic-calming measures near parks where advisable due to vehicle speeds and volumes.

Action P1.1.3. Improve intersections at access points to parks to create greater visibility for all users, and provide accessible curb ramps and additional time to cross the street.

Action P1.1.4. Improve public transportation connections to trails, parks, and other recreational locations.

Action P1.1.5. Ensure that all parks and open space can be reached through safe routes for bicycling, walking, and public transportation.

Action P1.1.6. Ensure that trails, parks, and open spaces have secure bicycle parking facilities.

-END SECTION-

Appendix A

Complete Streets Glossary

COMPLETE STREETS - Glossary of Terms

Term	Definition/Explanation
Active Transportation	Active transportation is travel powered by human energy. Walking and biking are the most common means of active transportation. To encourage more walking and biking, communities must create active transportation systems—seamless networks of accessible trails, sidewalks, and on-road bike facilities.
ADA	The Americans with Disabilities Act of 1990 gives civil rights protections to individuals with disabilities similar to those provided to individuals on the basis of race, color, sex, national origin, age, and religion. It guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, State and local government services, and telecommunications.
Amenity	A positive element(s) which contributes to the overall characteristic of an area.
Bike Boulevard	A bicycle boulevard is a roadway that motorists may use, but that prioritizes bicycle traffic through the use of various treatments. Through motor vehicle traffic is discouraged by periodically diverting it off the street. Remaining traffic is slowed to approximately the same speed as bicyclists. Stop signs and signals on the bicycle boulevard are limited to the greatest extent possible, except where they aid bicyclists in crossing busy streets. The bicycle level of service may be further enhanced through the use of directional signage and other amenities. The development of a bicycle boulevard may include the alteration of intersection controls, the installation of signage, stencils, or other treatments that facilitate bicycling. Bicycle boulevards are most effective when several treatments are used in combination.
Bike Lane	A portion of the roadway which has been designated by striping, signing and pavement marking for the preferential or exclusive use by bicyclists. Bicycle lanes make the movements of both motorists and bicyclists more predictable and as with other bicycle facilities there are advantages to all road users in striping them on the roadway.
Bike Plans	A community's vision to make bicycling an integral part of daily life. A plan recommends projects, programs and policies to encourage use of this practical, non-polluting and affordable mode of transportation. Two common overall goals of a bicycle plan: <ul style="list-style-type: none"> · To increase bicycle use, so that 5 percent of all trips less than five miles are by bicycle. · To reduce the number of bicycle injuries by 50 percent from current levels.
Bike Route	A roadway or path that has been identified by signing as a preferred bike route. Reasons for designating such routes include: <ul style="list-style-type: none"> · continuity between bicycle lanes, trails or other bicycle facilities · marking a common route for bicyclists through a high demand corridor · directing cyclists to low volume roads or those with a paved shoulder · directing cyclists to particular destinations (e.g. park, school or commercial district)
Buffer or Planting Strip	An undeveloped or landscaped area separating sidewalks from roadways.

Bus Shelter	An enclosed waiting area located near a bus station or stop that can feature great range in design, and functions. The simplest bus shelter might feature a roof, back wall and two side walls with a bench where passengers may wait for a bus.
Capital Improvements Plan (CIP) or Program	A short-range plan, usually 4-6 years, which identifies capital projects and equipment purchases, provides a planning schedule and identifies options for financing the plan. The plan provides a link between a local government entity and a comprehensive and strategic plans and the entity's annual budget.
Context Sensitive Solutions	Context sensitive solutions (CSS) is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility. CSS is an approach that considers the total context within which a transportation improvement project will exist.
Curb Extension or Bulb-out	An extension of the sidewalk into the street that reduces the distance pedestrians must cross and often calms traffic.
Curb Ramp or Curb Cut	A ramp providing a smooth transition between sidewalk and street that complies with the American with Disabilities Act (ADA) standards.
Eminent Domain	The power possessed by government to set aside property for a public use by supplying just compensation to the owner.
Form-Based Zoning Code	A means of regulating development to achieve a specific urban form. Form-based codes create a predictable public realm by controlling physical form primarily, with a lesser focus on land use, through city or county regulations. Form-based codes are a new response to the modern challenges of urban sprawl, deterioration of historic neighborhoods, and neglect of pedestrian safety in new development. Tradition has declined as a guide to development patterns, and the widespread adoption by cities of single use zoning regulations has discouraged compact, walkable urbanism. Form-based codes are a tool to address these deficiencies, and to provide local governments the regulatory means to achieve development objectives with greater certainty.
Gentrification	The process of renewal and rebuilding associated with the influx of middle-class or affluent people into deteriorating areas that often displaces poorer residents.
Greenways	Linear corridors of land that connect key resources and open space within a region. Open spaces are blocks of land that are generally self-contained with limited connections or linkages to other areas. A greenways network includes greenways as well as hubs of specifically identified natural resources or open space and manmade features or destinations that influence the development of the development of the linear greenway corridor
Infrastructure	The basic facilities, services, and installations needed for the functioning of a community, such as transportation, water and power lines, and public institutions.
Integrated Transport System	Networks of links (bus, rail road etc.) rather than individual routes, connected in terms of physical access, ticketing, service frequency, timing, and capacity.
Jurisdiction	The authority of a sovereign power to govern or legislate within certain territory such as the state, county, city, township, or village.
Land Use (see also zoning)	The actual use occupying or purpose for each parcel of land (e.g. industrial, commercial, residential).
Marked Crosswalk	Areas on the street (delineated by paint, brick, etc.) indicating where pedestrians should cross the road.

Master or Comprehensive Development Plan	A policy-based document that provides the vision of a community, but does not or cannot regulate properties or land use. It dictates public policy in terms of transportation, utilities, land use, recreation, and housing over a large geographical areas and a long-term time horizon.
Mixed-Use Development	An appropriate combination of multiple uses (e.g. residential, commercial, community, leisure), inside a single structure or place within a neighborhood, where a variety of different living activities (live, work, shop, and play) are in close proximity (walking distance) to most residents.
Non-Motorized Transportation	Existing infrastructure for non-motorized transportation, including sidewalks, bike lanes, mixed-use paths, public transportation (buses, subways, light-rail), and bike routes.
Non-Motorized Transportation Plan	A plan, generally completed at the local level, that provides a plan of action for making the community more friendly to biking and walking. Generally, a non-motorized plan typically identifies the transportation system's existing non-motorized facilities (sidewalks, bike lanes, mixed-use paths, public transportation, and bike routes), establishes a future conceptual network with a map and list of improvements, and identifies resources to help fund future additions to the non-motorized transportation network.
Ordinance	An authoritative decree or direction for a community. Establishes the law for implementing a community's vision. It is sometimes called a code.
Overdevelopment	An amount of development (building quantity, intensity of use in an area) that is excessive in terms of the demands of a community and the local characteristics of an area to support them.
Overpasses/underpasses	A street crossing separating pedestrians from motor vehicle traffic (e.g. bridge or tunnel).
Police Power	The power (or right) of government to restrict and regulate private rights pertaining to property and person for the public good.
Policy	A high-level overall plan to embrace general goals and acceptable procedures, especially of a governmental body. Policy guides actions and decisions toward those that are most likely to achieve a desired outcome.
Public Transportation/Transit	A shared passenger transportation service which is available for use by the general public and may include buses, trolleys, trams and trains, rapid transit (metro/subways/undergrounds etc), and ferries.
Raised Medians, Crossing Islands, and Mid-Block Crossings	The area between opposing lanes of traffic which provide pedestrians with a safe place to wait while crossing a street.
Resolution	A formal expression of opinion, intention, support or vision.
Road Capacity	The maximum volume and rate that automobile traffic can pass along a road within a particular set of conditions.
Road Diet	A change in the number of travel lanes, or width of existing lanes, with the addition of other elements such as bike lanes or car parking. Enhances safety by reducing traffic conflict points and lowering speeds.
Road Hierarchy	A system in which streets and highways are grouped into classes (by speed, volume, type, jurisdiction) according to the character of service they intend to provide.
Roundabout/Traffic Circles	A roundabout is a type of circular intersection in which road traffic must travel in one direction around a central island. Signs usually direct traffic entering the circle to slow down and give the right of way to drivers already in the circle. They can calm traffic in

	addition to providing a more steady traffic flow than conventional intersections.
Sharrows	A special symbol that denotes where a bicyclist should ride (usually in conjunction with a wider outside lane of 14 or 15 feet) without delineating a striped bike lane.
Sidewalk	A paved walkway that allows pedestrians to walk along, but separated from, the roadway.
Sign Code	An ordinance that regulates signs which are visible from streets or are visible from one site to another.
Smart Growth	Invests time, attention, and resources into restoring community and vitality to center cities and older suburbs. New smart growth is more town-centered, is transit and pedestrian oriented, and has a greater mix of housing, commercial and retail uses. It also preserves open space and many other environmental amenities.
Street Lighting	Illuminates the roadway, intersections, and sidewalks to improve vision and public safety.
Subdivision Regulations	Controls how land is divided into several smaller parts and then developed.
Temporary Walkways	Provide pedestrians with designated routes along a construction site when sidewalks and other pedestrian travel ways have been closed.
Traffic Calming	Physical changes (e.g. roundabouts, road diets, speed bumps, lane narrowing, tree placement at road edge, speed reduction) to a street to encourage drivers to drive slowly or to discourage cut-through traffic.
Traffic Sign	An official device or signage that gives a specific message, either by words or symbols, to the public.
Traffic Signal	A visual signal to control the flow of traffic. Pedestrian signals let pedestrians know when they have priority and warn drivers to stop/yield for pedestrians. There are varying kinds of signals.
Transit Oriented Development	The creation of compact, walkable communities centered around high quality transit systems. Residential and commercial districts designed to maximize access by public transit and non-motorized transportation, with good connectivity, mixed-use, parking management and other design features that facilitate public transit use and maximize overall accessibility.
Transportation Corridor	An interconnected transportation pathway that provides for the movement of people and goods between and within activity centers. A corridor encompasses single or multiple transportation routes or facilities (such as thoroughfares, public transit, railroads, highways, bikeways, etc.), the adjacent land uses and the connecting network of streets.
Urban Sprawl	The unplanned, uncontrolled spreading of urban development into areas adjoining the edge of a city, often creating low density development, auto dependency, and congestion.
Wide shoulders	In urban areas, paved shoulders are not normally provided on major roads. A wider outside (or curbside) lane allows a motorist to safely pass a cyclist while remaining in the same lane and this can be a significant benefit and improvement for cyclists, especially more experienced riders. A wider outside lane also helps trucks, buses, and vehicles turning onto the major road from a driveway or wide street.
Zoning	Dividing an area into zones or sections reserved for different purposes such as residence, business, and manufacturing

Appendix B

Resources

Complete Streets Resources

Regional Planning Organization. Midstate Regional Planning Authority (Middletown's former RPO) has merged with the CT River Estuary RPA. The new name of the Agency is the Lower CT River Valley Council of Government, River CoG for short. They are now located at 145 Dennison Road, Essex, CT 06426. Telephone: (860) 581-8554

The MPO conducts regional transportation planning in the urbanized area, and all federally funded transportation projects need to be approved by the MPO. In this effort the MPO is required to produce a Unified Planning Work Program (UPWP). the UPWP annually lists the activities the MPO will be involved with for the fiscal year.

The MPO also develops a Transportation Improvement Program (TIP). The TIP is produced annually or bi-annually. The TIP is a list of federally funded transportation projects to maintain and enhance the transportation network of the region. Projects in the TIP are scheduled to receive federal funding over the next five fiscal years. They also must not increase emissions to be in conformity with the Clean Air Act Amendments of 1990. The TIP is an "active" document and is updated throughout the year. MPO's also are required to produce a long-range Regional Transportation Plan (RTP). The RTP is a twenty-five year plan and is updated every three years. The plan promotes the development of an integrated transportation system using various modes to provide for an efficient system, which maximizes the mobility of persons and goods through the region.

<http://www.rivercog.org>

Bike Walk Connecticut is a member-supported non-profit organization making cycling and walking safe, feasible and attractive for a healthier, cleaner Connecticut. We work locally to increase grassroots efforts to make communities better places to bike and walk; at the state legislature to advance laws that protect the rights of cyclists and walkers, and at the DOT to make sure that policies and engineering practices that will improve conditions for cyclists are implemented. We are also active at the federal level, working cooperatively with national organizations to ensure continued funding for biking and walking projects.

<http://www.bikewalkct.org>

Smart Growth America advocates for people who want to live and work in great neighborhoods. We believe smart growth solutions support thriving businesses and jobs, provide more options for how people get around and make it more affordable to live near work and the grocery store. Our coalition works with communities to fight sprawl and save money. We are making America's neighborhoods great together.

<http://www.smartgrowthamerica.org/>

The Surface Transportation Policy Project is a diverse, nationwide coalition working to ensure safer communities and smarter transportation choices that enhance the economy, improve public health, promote social equity, and protect the environment.

<http://www.transact.org>

The American Planning Association is an independent, not-for-profit educational organization that provides leadership in the development of vital communities by advocating excellence in community planning, promoting education and citizen empowerment, and providing the tools and support necessary to meet the challenges of growth and change.

<http://www.planning.org>

Rails-to-Trails Conservancy is a non-profit organization based in Washington, D.C., whose mission it is to create a nationwide network of trails from former rail lines and connecting corridors to build healthier places for healthier people.

<http://www.railstotrails.org/index.html>

The Bicycle & Pedestrian Program of the Federal Highway Administration's Office of Human Environment promotes bicycle and pedestrian transportation use, safety, and accessibility.

Each State has a Bicycle and Pedestrian Coordinator in its State Department of Transportation to promote and facilitate the increased use of nonmotorized transportation, including developing facilities for the use of pedestrians and bicyclists and public educational, promotional, and safety programs for using such facilities. The [State Coordinators](#) can help you with questions specific to your State.

The FHWA Bicycle & Pedestrian Program issues guidance and is responsible for overseeing that requirements in legislation are understood and met by the States and other implementing agencies.

On this site you can find information about the amount of [federal funding spent](#) on pedestrian and bicycle projects in your state, available [federal funding sources](#), existing [legislation](#), and guidance about [accessible design](#). FHWA also sponsors resources such as the [Pedestrian and Bicycle Information Center](#) to provide information on a wide variety of engineering, encouragement, education, and enforcement topics. The Center was established with funding from the US DOT and is operated by the University of North Carolina Highway Safety Research Center.

http://www.fhwa.dot.gov/environment/bicycle_pedestrian/index.cfm

California Complete Streets Resource Toolkit. SACOG, in coordination with the local Complete Streets Coalition, has developed a Complete Streets Resource Toolkit. The toolkit is a collection of valuable resources related to complete streets, and part of SACOG's complete streets technical assistance program. The toolkit is funded through a Caltrans grant, and will be continually maintained and updated through user input

<http://www.sacog.org/complete-streets/toolkit/files/categories/pedestrian-walkability.html>

The Pedestrian and Bicycle Information Center (PBIC) is a national clearinghouse for information about health and safety, engineering, advocacy, education, enforcement, access, and mobility for pedestrians (including transit users) and bicyclists. The PBIC serves anyone interested in pedestrian and bicycle issues, including planners, engineers, private citizens, advocates, educators, police enforcement, and the health community.

<http://www.bicyclinginfo.org/>

The National Center for Safe Routes to School assists states and communities in enabling and encouraging children to safely walk and bicycle to school. The National Center serves as the information clearinghouse for the federal Safe Routes to School program.* The organization also provides technical support and resources and coordinates online registration efforts for U.S. Walk to School Day and facilitates worldwide promotion and participation.

<http://www.saferoutesinfo.org/>

Connecticut Program: <http://www.ctsaferoutes.org/>

The Alliance for Biking & Walking creates, strengthens and unites state/province and local bicycle and pedestrian advocacy organizations. The Alliance has created, strengthened and empowered effective and sustainable bicycle and pedestrian advocacy organizations in every state, province and major city in North America. These organizations are highly respected by the public, media and policy makers. Their efforts in their communities and their united strength at the national level have transformed communities to places where it is easy, safe, desirable and common for all people to bike and walk. Alliance leaders and organizations in our movement are diverse, are intentional about engaging their diverse populations in mainstreaming bicycling and walking as an option for all, and have engaged in partnerships with other organizations, agencies, disciplines, and allies to expand the number of people biking and walking in their communities.

<http://www.peoplepoweredmovement.org/site/>

MAP-21, the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), was signed into law by President Obama on July 6, 2012. Funding surface transportation programs at over \$105 billion for fiscal years (FY) 2013 and 2014, MAP-21 is the first long-term highway authorization enacted since 2005.

MAP-21 is a milestone for the U.S. economy and the Nation's surface transportation program. By transforming the policy and programmatic framework for investments to guide the system's growth and development, MAP-21 creates a streamlined and performance-based surface transportation program and builds on many of the highway, transit, bike, and pedestrian programs and policies established in 1991.

<http://www.fhwa.dot.gov/map21/>

Bicycle Facilities and the Manual on Uniform Traffic Control Devices Background. The Federal Highway Administration receives occasional inquiries about what bicycle facilities, signs, and markings are permitted in the [Manual on Uniform Traffic Control Devices](#) (MUTCD). The table lists various bicycle-related signs, markings, signals, and other treatments and identifies their status (e.g., can be implemented, currently experimental) in the 2009 version of the MUTCD.

http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_guidance/mutcd_bike.cfm

The Institute of Transportation Engineers is an international educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs. ITE facilitates the application of technology and scientific principles to research, planning, functional design, implementation, operation, policy development and management for any mode of ground transportation. Through its products and services, ITE promotes professional development of its members, supports and encourages education, stimulates research, develops public awareness programs and serves as a conduit for the exchange of professional information.

<http://www.ite.org/>

The League of American Bicyclists promotes bicycling for fun, fitness and transportation and work through advocacy and education for a bicycle-friendly America. We do this by representing the interests of the nation's 57 million cyclists. With a current membership of 300,000 affiliated cyclists, including 25,000 individuals and 700 affiliated organizations, the League works to bring better bicycling to your community. LAB's Bicycle Friendly America program provides incentives, hands-on assistance, and award recognition for communities, universities and businesses that actively support bicycling, and ranks states annually based on their level of bike-friendliness.

<http://www.bikeleague.org/>

The Local Government Commission assists local governments in establishing and nurturing the key elements of livable communities: a healthier human and natural environment, a more sustainable economy, an actively engaged populace, and an equitable society.

<http://www.lgc.org/>

State of Connecticut Transportation Enhancement Program. The Transportation Enhancement (TE) Program is administered by the State of Connecticut Department of Transportation (Department) on behalf of the Federal Highway Administration (FHWA). The TE Program offers a source of funds for addressing the needs of non-motorized transportation users. A focus of the State's program is safety, accessibility and connectivity.

<http://www.ct.gov/dot/cwp/view.asp?a=1383&Q=487746&PM=1>

Connecticut's Bicycle Map website. This website was launched in 2009 in response to the demand for on-line access to an interactive statewide bicycle map. This website includes the map as well as current information related to bicycling in Connecticut.

<http://www.ctbikemap.org/index.html>

The CT Bicycle and Pedestrian Advisory Board seeks to achieve full integration of walking, bicycling, and transit use into Connecticut's transportation system consistent with principles of public safety, convenience, connectivity, human health, context-sensitivity, equity, aesthetics, and a sustainable environment that make our communities vibrant places to live and enjoy.

<http://www.ctbikepedboard.org/>

Connecticut Statewide Bicycle and Pedestrian Transportation Plan

<http://www.ct.gov/dot/cwp/view.asp?a=3531&q=259656>

Massachusetts Department of Transportation, Healthy Transportation Compact is a key requirement of the landmark transportation reform legislation signed into law in June 2009. Co-chaired by the Secretary of Transportation and the Secretary of Health and Human Services and including the Secretary of Energy and Environmental Affairs, MassDOT Highway Administrator, MassDOT Transit Administrator, and Commissioner of Public Health, this inter-agency initiative is designed to facilitate transportation decisions that balance the needs of all transportation users, expand mobility, improve public health, support a cleaner environment and create stronger communities.

<http://www.massdot.state.ma.us/GreenDOT/HealthyTransportationCompact.aspx>

American Association of State Highway and Transportation Officials. AASHTO is a nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia, and Puerto Rico. It represents all five transportation modes: air, highways, public transportation, rail, and water. Its primary goal is to foster the development, operation, and maintenance of an integrated national transportation system.

As the voice of transportation, AASHTO works to educate the public and key decision makers about the critical role that transportation plays in securing a good quality of life and sound economy for our nation. AASHTO serves as a liaison between state departments of transportation and the Federal government. AASHTO is an international leader in setting technical standards for all phases of highway system development. Standards are issued for design, construction of highways and bridges, materials, and many other technical areas.

www.transportation.org

National Association of City Transportation Officials. NACTO was founded in 1996 by then Commissioner Elliot Sander of New York City's Department of Transportation after concluding that, unlike the nation's States which often interact with each other and through the American Association of State and Highway Transportation Officials (AASHTO), the large central cities had virtually no meaningful political or technical relationships with each other. Moreover, they also lacked such critical relationships with the U.S. Department of Transportation (USDOT).

The NACTO Urban Bikeway Design Guide is based on the experience of the best cycling cities in the world. The designs in this document were developed by cities for cities, since unique urban streets require innovative solutions. Most of these treatments are not directly referenced in the current version of the AASHTO Guide to Bikeway Facilities, although they are virtually all (with two exceptions) permitted under the Manual on Uniform Traffic Control Devices (MUTCD). All of the NACTO Urban Bikeway Design Guide treatments are in use internationally and in many cities around the US.

<http://nacto.org/cities-for-cycling/design-guide/>

The mission of the **Association of Pedestrian and Bicycle Professionals** (APBP) is to grow the pedestrian and bicycle profession and its influence by facilitating the exchange of professional and technical knowledge, elevating practitioners' skills and defining the field.

Launched in 1994 at the ProBike Conference in Portland, Oregon, APBP grew out of conversations that began at the 1992 Velo-Mondiale Conference and the first U.S. DOT meeting of state Bicycle and Pedestrian Coordinators in 1993. A core group of visionaries identified the need for an information exchange among the people working on bicycle and pedestrian transportation in different parts of the country and around the world. Before that time, organizers did not see enough demand for a formal organization.

<http://www.apbp.org>

-END SECTION-

Appendix C

Walkability Assessment Form

Walkability Assessment

The assessment should be completed by an authorized individual or representative group of the municipality. If you are in a group, it is helpful if one person takes pictures while another person documents notes on paper. Before walking, read over the questions on the following pages.

Complete the checklist questions by providing each one with an overall rating. On a **scale from 1-6 (high to low)** rate the various elements on the checklist. With each question you should determine the overall conditions of the area and note specific problems within the area being assessed.

Who is participating in the assessment walk?

Name _____ Title _____

Phone _____ Email _____

Location of Assessment (Define a specific area, route, or neighborhood):

Date of Assessment: ____/____/____

Time observations began: _____ a.m. p.m.

Participant Name: _____

Walkability Rating Score

1 = Excellent 2 = Very Good 3 = Good 4 = Some Problems 5 = Many Problems 6 = Awful

Walking Facilities and Their Maintenance

1. Are there sidewalks, multi-use paths, or paved trails present?

Rating (circle one): **1 2 3 4 5 6**

Locations of missing areas: _____

2. Is the sidewalk free from major misalignment, cracks, or other pavement condition issues?

Rating (circle one): **1 2 3 4 5 6**

Locations of problems: _____

3. Do you feel safe using the sidewalk, multi-use path, or paved trail?

Rating (circle one): **1 2 3 4 5 6**

Locations of problems: _____

4. Does the sidewalk, multi-use path, or paved trail accommodate people who use strollers, wheelchairs, or other assistive mobility devices?

Rating (circle one): **1 2 3 4 5 6**

Locations of problems: _____

Walkability Rating Score

1 = Excellent 2 = Very Good 3 = Good 4 = Some Problems 5 = Many Problems 6 = Awful

5. Is the sidewalk continuous, (i.e., without gaps)?

Rating (circle one): **1 2 3 4 5 6**

Locations of problems: _____

6. Are the sidewalks a minimum of five feet wide to accommodate at least two pedestrians to walk together and/or a wheelchair?

Rating (circle one): **1 2 3 4 5 6**

Locations of problems: _____

7. Is the sidewalk located on both sides of the street?

Rating (circle one): **1 2 3 4 5 6**

Locations of problems: _____

8. Are there curb cuts present that allow pedestrians and people with strollers, wheelchairs, or senior citizens to navigate the sidewalk, paved trail, or multi-use path safely and conveniently?

Rating (circle one): **1 2 3 4 5 6**

Locations of problems: _____

Walkability Rating Score

1 = Excellent 2 = Very Good 3 = Good 4 = Some Problems 5 = Many Problems 6 = Awful

9. Is the sidewalk free from obstructions, such as poles, signs, vegetation, etc?

Rating (circle one): **1 2 3 4 5 6**

Locations of problems: _____

Pedestrian Amenities

1. Are there crosswalks and/or pedestrian signals located at intersections?

Rating (circle one): **1 2 3 4 5 6**

Locations of problems: _____

2. Is it easy to cross streets?

Yes

No (Check problems that apply):

Road was too wide

Location: _____

Traffic signals did not provide adequate time to cross

Location: _____

Lack of pedestrian signalization

Location: _____

Traffic signals made us wait too long to cross

Location: _____

- Street needed striped crosswalks

Location: _____

- Blocked sight lines

Location: _____

- Curb ramps were needed or ramps needed repair

Location: _____

- Drivers seemed to be speeding

Location: _____

- Other issues and observations: _____

Location: _____

3. What destinations are present? Check all that apply and specify:

- Small grocery/convenience store _____

- Farmers market _____

- Food establishment (e.g., restaurant, bakery, café) _____

- Supermarket _____

- Pharmacy _____

- Entertainment (e.g., movie theater, arcade) _____

- Church/temples/mosque _____

- Library _____

- Post Office _____

- Bank _____

- Laundry/dry cleaner _____

- Indoor fitness facility _____

- Senior center _____

- Playground/park/trailhead _____

- School (elementary, middle, high) _____

- College/tech school/university _____

- Retail stores _____

- Employment centers _____

- Smoke-free public spaces _____

- Other, specify: _____

4. How pleasant is your walk? Check all that apply:

- Needed more vegetation

Location: _____

- Lacked personal security

Location: _____

- Not well lit

Location: _____

- Dirty, lots of litter or trash

Location: _____

- Lack of maintenance

Location: _____

- No bench or place to rest

Location: _____

- Too much high-speed traffic

Location: _____

- Other, specify: _____

Location: _____

5. Is there grass or other buffer between the roadway and sidewalk? Check all that apply:

- Trees

Location: _____

- Landscaping

Location: _____

- Bike Lanes

Location: _____

- Parked Cars

Location: _____

Walkability Rating Score

1 = Excellent 2 = Very Good 3 = Good 4 = Some Problems 5 = Many Problems 6 = Awful

6. Is the sidewalk part of a larger pedestrian network?

Rating (circle one): **1 2 3 4 5 6**

Locations of problems: _____

Appendix D

Bikeability Assessment Form

Bikeability Assessment

The assessment should be completed by an authorized individual or representative group of the municipality. Before riding, read over the questions on the following pages.

Complete the checklist questions and provide each one with an overall rating, on a **scale from 1-6 (high to low)**.

Who is participating in the assessment?

Name _____ Title _____

Phone _____ Email _____

Location of Assessment (Define a specific area, route, neighborhood, or community):

Date of Assessment: ____/____/____

Time observations began: _____ a.m. p.m.

How bikeable is your community?

Bikeability Rating Score

1 = Excellent 2 = Very Good 3 = Good 4 = Some Problems 5 = Many Problems 6 = Awful

1. Did you have a place to bicycle safely?

... If on a road shared with motor vehicles:

- Yes
 - No (Check problems that apply):
 - No space provided for bicyclists
 - Bicycle lane or paved shoulder disappeared
 - Heavy and/or fast-moving traffic
 - Too many trucks or buses
 - No space for bicyclists on bridges or in tunnels
 - Poorly lit roadways
 - Other: _____
-

... If on an off-road path or trail, without motor vehicles:

- Yes
 - No (Check problems that apply):
 - Path ended abruptly
 - Path didn't go where I desired
 - Intersecting roads were hard to cross
 - Path was not large enough to accommodate traffic
 - Unsafe sharp turns or dangerous slopes
 - Path was uncomfortable because of too many hills
 - Path was poorly lit
 - Other: _____
-

Overall Rating (circle one): **1 2 3 4 5 6**

Bikeability Rating Score

1 = Excellent 2 = Very Good 3 = Good 4 = Some Problems 5 = Many Problems 6 = Awful

2. How was the surface that you rode on?

- Good
 - Some problems (Check problems that apply):
 - Potholes
 - Cracked or broken pavement
 - Debris (e.g. broken glass, sand, gravel, etc)
 - Dangerous drain grates, utility covers, or metal plates
 - Uneven surface or gaps
 - Slippery surfaces when wet (e.g. bridge decks, construction plates, road markings)
 - Bumpy or angled railroad tracks
 - Rumble strips
 - Other: _____
-

Overall Rating (circle one): **1 2 3 4 5 6**

3. How were the intersections you rode through?

- Good
 - Some problems (Check problems that apply):
 - Had to wait too long to cross intersection
 - Couldn't see crossing traffic
 - Signal didn't give me enough time to cross the road
 - Signal didn't change for a bicycle
 - Unsure where or how to ride though intersection
 - Other: _____
-

Overall Rating (circle one): **1 2 3 4 5 6**

Bikeability Rating Score

1 = Excellent 2 = Very Good 3 = Good 4 = Some Problems 5 = Many Problems 6 = Awful

4. Did drivers behave well?

- Yes
 - Some problems (Check problems that apply):
 - Drove too fast
 - Passed me too close
 - Did not signal
 - Harassed me
 - Cut me off
 - Ran red light or stop sign
 - Other: _____
-

Overall Rating (circle one): 1 2 3 4 5 6

5. Was it easy for you to use your bike?

- Yes
 - Some problems (Check problems that apply):
 - No maps, signs, or road markings to help me find my way
 - No safe or secure place to leave my bicycle at my destination
 - No way to take my bicycle with me on the bus or train
 - Scary dogs
 - Hard to find a direct route I liked
 - Route was too hilly
 - Other: _____
-

Overall Rating (circle one): 1 2 3 4 5 6

6. What did you do to make your ride safer?

Your behavior contributes to the bikeability of your community. Check all that apply:

- Wore a bicycle helmet
- Obeyed traffic signal and signs
- Rode in a straight line (didn't weave)
- Signaled my turns
- Rode with (not against) traffic
- Used lights, if riding at night
- Wore reflective and/or retroreflective materials and bright clothing
- Was courteous to other travelers (motorists, skaters, pedestrians, etc)

7. Tell us a little about yourself.

In good weather months, about how many days a month do you ride your bike?

- Never
- Occasionally (one or two)
- Frequently (5-10)
- Most (more than 15)
- Every day

Which of these phrases best describes you?

- An advanced, confident rider who is comfortable riding in most traffic situations
- An intermediate rider who is not really comfortable riding in most traffic situations
- A beginner rider who prefers to stick to the bike path or trail

How did your community rate?

Add up your overall rating scores (exclude questions 6 & 7):

Question 1: _____

Question 2: _____

Question 3: _____

Question 4: _____

Question 5: _____

Total : _____

Score Key :

26 - 30	This is a very good bicycle-friendly community
21-25	This is a good bicycle-friendly community, but there is still room for improvement.
16-20	Conditions for riding are ok, but not ideal. Plenty of room for improvement.
11-15	Conditions for riding are poor. Many improvements are needed.
5-10	Conditions for riding are awful. Serious and major improvements are needed.

Focus Area

Choose a specific span within your assessment area.

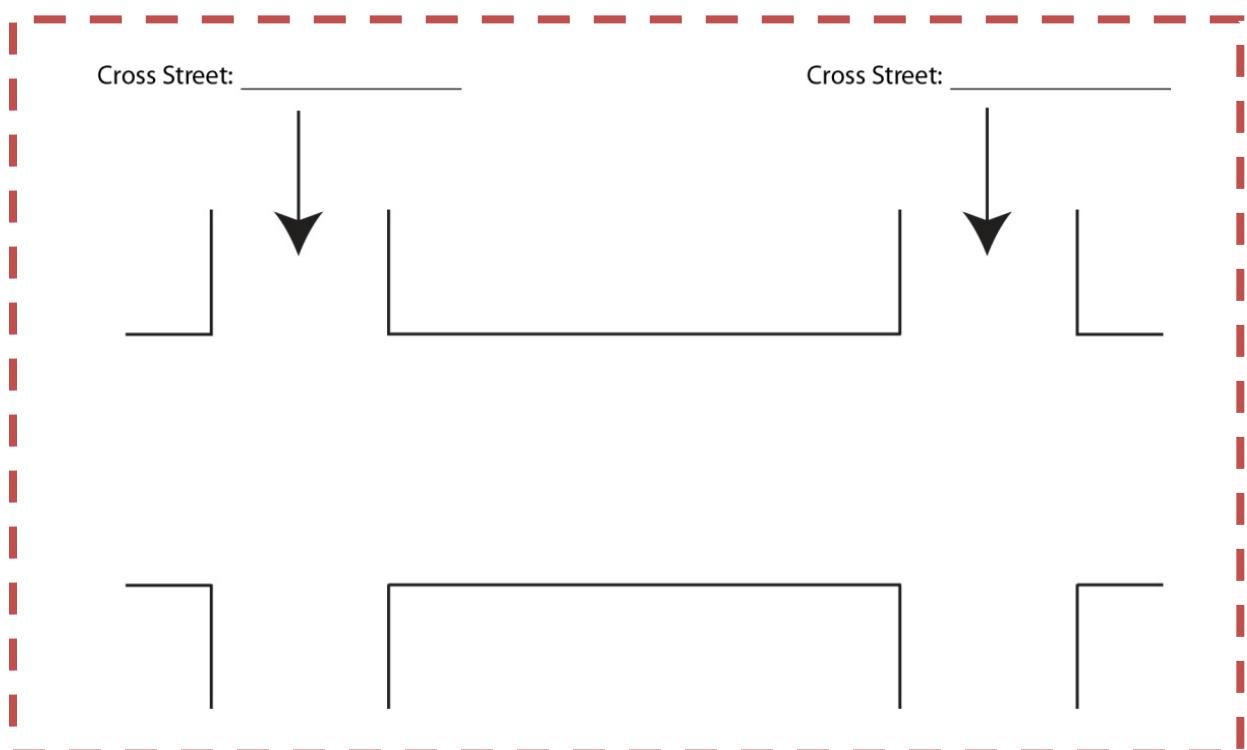
Street: _____

Block: _____ to _____ (street number)

Street/Road

Number of lanes of traffic _____

Bike lanes/shoulders	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Surface condition	<input type="checkbox"/> Poor	<input type="checkbox"/> Fair	<input type="checkbox"/> Good
On street parking	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Traffic volume	<input type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High
Speed limit	_____ mph		
Signals at intersections	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
...If yes what type?	<input type="checkbox"/> Stop sign	<input type="checkbox"/> Traffic light	<input type="checkbox"/> Yield sign
Visibility at intersections	<input type="checkbox"/> Poor	<input type="checkbox"/> Fair	<input type="checkbox"/> Good
Bridges	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Terrain creating visibility issues	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Other safety issues (diagram below)	_____		



Appendix E

Complete Streets Master Plan Priorities Map

Appendix F

Main Street to Wesleyan Hills Multiuse Path Concept Map