# **APPENDIX 1**

### **BICYCLE AND PEDESTRIAN ACTION PLAN**

### Bicycle and Pedestrian Action Plan Easton, Maryland April 2009



The Easton Bicycle and Pedestrian Action Plan was prepared by BikeWalkTalbot, in cooperation with the Department of Planning and Zoning, Town of Easton, Maryland.

#### **BikeWalkTalbot Planning Committee**

BikeWalkTalbot is an advocacy organization supporting a bicycle-friendly and walkable Talbot County.

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#### INTRODUCTION

Envisioning Easton as a town that promotes a balance between travel efficiency and quality-of-life will lead to the establishment of a people-friendly place focused on neighborhood preservation, increased community cohesion, and a more vibrant and sustainable town center.

Our streets serve many functions – providing citizens of all ages and degrees of mobility the ability to walk down the sidewalk to grab a cup of coffee, speak with their neighbors, walk their children to school, or bicycle to work. The guiding principles for this plan seek to encourage a shift in the way we think and act when it comes to traveling. This shift in thinking aims to overcome the traditional approach that Easton has taken in the past, assuming the primary use of the automobile in the design and operation of its transportation infrastructure.

Regional projections show that population growth is expected to continue to increase in Easton and the surrounding area, placing further pressure on transportation infrastructure. The essential character of our land use, the future quality of life for Easton residents, and the accessibility of all of Easton's assets is dependent upon the creation of a community that provides transportation choices. Sidewalks and bike lanes, paths and trails make streets and town centers into destinations for shopping and entertainment. Investing in walking and biking facilities helps local business and is an investment in the local economy.

As we continue to grow, Easton should embrace all methods of overcoming automobile dependency and simultaneously provide transportation options alongside continued economic growth and a healthy environment. The problem of traffic congestion not only impacts the required time for daily commutes, it has a negative impact on the quality of life resulting in increased travel times for necessary trips to the grocery store, library, restaurant and post office. Congestion limits the activities of individuals with mobility impediments and those without access to automobiles; it discourages walking and physical activity; it contributes to poor air quality; and it also impacts Easton's economic base, deterring tourists from visiting Easton during certain times of the year, and deterring the establishment of new businesses.

#### **Economic Opportunity**

Easton has untapped potential to promote bicycle tourism. The unique character that defines this area and contributes to residents' quality of life can also attract visitors that play an important role in the local economy.

Bicycle tourists have strong preferences for different types of experiences depending on their bicycling skill level and the make-up of their group. Priorities for bicyclists in selecting destinations include scenery, culture, bicycle-friendly roads or shared-use paths, services and accommodations with a bike-friendly orientation, and the uniqueness of an area.

States across the country are aware of the economic potential that bicycle tourism can bring and are promoting it as a cost-effective, clean industry, with great multiplier effects to enhance their local economies. Colorado estimates up to \$193 million<sup>1</sup> and Maine, over \$66.8 million<sup>2</sup>, in total annual economic benefits from bicycle tourism. The North Carolina Department of Transportation reports a 9-to-1 return-on-investment on facilities in the Outer Banks – an estimated \$60 million annually<sup>3</sup>.

With safe, well-planned roads and shared-use pathways, Easton's history, culture, distinctive small town character and natural landscape is widely marketable to thousands of national and international tourists that will bring money into the local economy. Bicyclists visiting a community spend money on food, lodging, equipment, services, and other attractions and entertainment.

Due to the spending potential of their demographics, they often patronize locally-owned and high-end establishments and will pay more to experience the local flavor of a place. Lodging, bakeries, cafes, shops, and cultural attractions benefit from bicycle tourism, resulting in more money being spent that stays in the local economy and supports the overall local tax-base and employment.

#### **Guiding Principles**

This plan establishes the goals, strategies, actions and policies that will guide the critical decisions that need to be made as we design and build our transportation infrastructure with a balance between travel efficiency and quality-of-life.

The guiding principles for this plan are that Easton will...

- ...provide quality pedestrian and bicycle accommodations.
- ...provide all its citizens, regardless of age or ability, with accessibility and mobility.
- ...further transportation policies that enhance quality of life, support livable, intown land use and encourage neighborhood preservation.
- ...lead Talbot County in promoting environmentally-friendly transportation policies.
- ...ensure accessible, reliable and safe transportation for older and disabled citizens.
- ...develop innovative local and regional transit options.

<sup>1.</sup> The Economic Impact of Bicycling in Colorado, http://atfiles.org/files/pdf/CObikeEcon.pdf

<sup>2.</sup> Bicycle Tourism in Maine: Economic Impacts and Marketing Recommendations, http://www.maine.gov/mdot/opt/pdf/biketourismexecsumm.pdf

<sup>3.</sup> Pathways to Prosperity: Economic Impact of Investing in Bicycle Facilities: A Case Study, http://www.ncdot.org/transit/bicycle/safety/268-AB\_NCDOT\_bro\_FINAL\_rev.pdf

#### **PURPOSE OF THE PLAN**

This is a long-range plan which identifies proposed new and improved bicycle and pedestrian facilities for the Town of Easton. It identifies a strategy to implement the plan and also a number of education and promotion actions to improve conditions and facilities, and encourage walking and bicycling as a means of transportation and recreation. The goal is to provide a roadmap for the next 5-10 years so that Easton can prioritize the limited funding available for infrastructure improvements and improve access for persons with disabilities, older adults, pedestrians and bicyclists.

#### **General Public Interest Purposes**

The general public interest purposes implicit in this Bicycle and Pedestrian Action Plan are:

- To promote public health and safety, access to community facilities and businesses for all, and to promote diverse modes of transportation.
- To increase bicycle and pedestrian use.
- To identify a potential network of bicycle and pedestrian facilities.
- To identify methods of creating the network.

#### **Objectives of the Plan**

- To identify locations for improved facilities or engineering improvements which:
  - connect neighborhoods to adjacent existing schools, activity centers, recreational facilities and transit stops,
  - close gaps between existing facilities,
  - facilitate travel between residential neighborhoods and key employment, education, recreation, and retail establishments,
  - connect Easton with neighboring communities
- To identify actions which promote walking and bicycling through education, promotion and encouragement
- To outline an implementation strategy for the actions identified in the Action Plan.

#### Methodology

The Easton Bicycle and Pedestrian Action Plan is the result of a three month research and planning process that was initiated by Easton residents with the support of Town of Easton staff. The process began with evaluation of the roadway network, including the current quality of service on existing facilities, current travel behavior, and demand for future travel in order to set appropriate goals for the future. Criteria for establishing new facilities include potential destinations, logical trip origins, and opportunity for development of connectivity with existing infrastructure.

Recommended goals, objectives and initiatives will provide safe, convenient and acceptable ways for people of all abilities to travel in and around Easton for all purposes.

Developed under the direction of a local citizen advocacy group, this plan responds to the need for the integration of transportation alternatives in Easton, which include:

- Designation of bicycle routes and pedestrian links and connections
- Upgrading of critical identified intersections
- Creation of links to high-use areas from neighborhoods
- Development of links to existing routes and pathways
- Establishment of routes and pathways based on destinations
- Provision of safe bicycle parking facilities
- Links of residential subdivisions
- Provision of sidewalk continuity

Research was also conducted on leading bicycle and pedestrian friendly cities and states across the U.S., and our findings indicate that best practices are defined across five categories termed the "Five Es" – Engineering, Enforcement, Encouragement, Evaluation, and Education – that govern the decisions to develop, implement, and manage bicycle and pedestrian plans. The Five Es have been adopted by the League of American Bicyclists, the Alternative Transportation Canada 'Go for Green', and the European Local Transportation Information Services (ELTIS).

This plan utilizes this method in designing and specifying goals, objectives and initiatives:

ENGINEERING: the identification of standards, design guidelines, and classifications for provision of infrastructure.

EDUCATION: the development of marketing and public information programs and materials to expand public knowledge to bicyclists, pedestrians and motorists.

ENCOURAGEMENT: the development of incentives to enhance the use of bicycling and walking as alternative transportation methods.

ENFORCEMENT: the establishment of rules for bicyclists, pedestrians and motorists on all types of routes, and the connections between these parties and law enforcement.

EVALUATION & PLANNING: The establishment of clear measurement tools to evaluate infrastructure and programs under the Five Es to assist with future planning.

#### GOALS, OBJECTIVES AND INITIATIVES: BICYCLING

The following goals and objectives should be followed by the Town and any other responsible agency, subject to fiscal budgetary limitations. Projects beyond the fiscal ability of the Town to reasonably fund through general revenues should be pursued through grant opportunities, developer contributions, or a combination thereof.

**Mission:** To promote and facilitate bicycling as a safe, convenient and comfortable form of transportation and recreation in Easton.

Goal 1 – ENGINEERING: Develop a connected system of primary and secondary bikeways with ample bicycle parking to serve all types of bicyclists' needs.

- Objective 1: Make bicycling safe and inviting on the streets of Easton. Initiatives:
  - Add bicycle lanes, signed bicycle routes and shared lane markings to develop the on-street bikeway network (see page 13).
  - Use innovative designs and bicycle-specific treatments at intersections and small connector paths to improve safety.
  - Consider the adopted bicycle route network in prioritizing street resurfacing, reconstruction, and streetscape projects.
  - Coordinate planning, design, and implementation of bicycle facilities with other city plans.
  - Create a checklist-style system that encourages connectivity and universal access in all new developments and for use in all development site review plans.
  - Coordinate planning, design, and implementation of bicycle improvements near the town line with adjacent communities.
- Objective 2: Identify and sign select Bicycle Routes to improve way-finding among popular destinations in the Town of Easton. <u>Initiatives:</u>
  - Provide a set of spine routes that will be easy-to-follow for novice bicyclists, new bicycle commuters, residents and tourists.
  - Provide a set of spine routes that touch every Ward and serve the most important destinations needing bicycle access and way-finding guidance.
  - Contribute to the physical and visual presence of bicycle facilities on the Town street and roadway system, which alerts motorists and all other users of the transportation system that bicyclists have "a right to the road," and are to be expected along these and other routes throughout Easton.

- Objective 3: Increase the availability of bicycle parking and support facilities at destinations throughout Easton.
   Initiatives:
  - o Launch a bicycle parking initiative.
  - Require new housing, retail and office development to provide bicycle parking.
  - Work with Delmarva Community Transit to accommodate bicycles in support of a multi-modal transit system, and improve bicycle parking at transit stops.
- Objective 4: Continue to develop off-road paths to create a connected trail system.

#### Initiatives:

- o Improve access to Rails-to-Trails pathways via on-street network.
- Support ongoing Rails-to-Trails pathways development through Easton via Town of Easton Parks and Recreation in cooperation with Talbot County Parks and Recreation.

# Goal 2 – EDUCATION AND ENCOURAGEMENT: Implement safety, education and encouragement programs to increase bicycle usage.

- Objective 1: Educate the public (motorists, bicyclists, and pedestrians) about bicycle and vehicle operation in traffic conditions. <u>Initiatives:</u>
  - Educate motorists and bicyclists about mutual rights and responsibilities (see Program Ideas on page 28).
  - Educate future motorists, bicyclists and pedestrians about safe travel behavior and vehicle operation (see Program Ideas on page 28).
  - Create and implement a Safe Routes to School Program in public and private schools (see Resources and References on page 26).
- Objective 2: Encourage increased bicycling by promoting health, recreation, transportation, and tourist opportunities. Initiatives:
  - Establish partnerships with health organizations such as the Talbot County Health Department, Shore Health System and the YMCA of Talbot County to promote bicycling as healthy transportation.
  - Promote bicycling for commuting, errands, socializing, and exercising (see specific Program Ideas on page 28).
  - Partner with local businesses and agencies to promote bicycle touring opportunities – Easton Economic Development, Town of Easton Parks and Recreation, Talbot County Office of Tourism, Talbot County Chamber of Commerce, Talbot County Parks and Recreation and Maryland Office of Tourism.



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In 1964, 50 percent of kids rode bikes to school and the obesity rate was 12 percent.

**In 2004**, 3 percent of kids rode bikes to school and the obesity rate was 45 percent.

**Between 1960 and today**, the average weight of a 6-to-11 year old child has increased 11 pounds.

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Source: 1world2wheels: http://1world2wheels.org/get-involved

# Goal 3 – ENFORCEMENT AND SAFETY: Institute policies that support implementation of Bicycle Plan goals and objectives with community support and input.

#### • Objective 1: Improve enforcement of traffic laws related to bicycling. Initiatives:

- Develop partnership with the Easton Police Department to identify and address bicycle-vehicle safety measures through enforcement and new or amended laws.
- Expand training for Town of Easton police officers regarding bicycle safety laws and issues faced by on-street bicyclists.
- Identify the most common conflicting movements between bicycle and motor vehicle users and determine enforcement mechanisms to mitigate these conflicts.

#### Objective 2: Create structure to implement the Bicycle Plan goals and objectives.

#### Initiatives:

- Fund a part-time Bicycle & Pedestrian Coordinator (or possibly use interns) who will work with residents, community groups, businesses, civic associations, property owners and Town of Easton departments to implement this plan.
- Reduce the incidence of bicycle theft through a supportive Town of Easton Bicycle Registration Program.
- Produce and distribute bicycle education materials through Town of Easton and Talbot County business and tourism agencies and organizations. This may include an Easton Bicycling Map, a semi-annual newsletter for program and route updates, and a Bike Easton section to the Town of Easton's Web site
- Use targeted outreach programs and collateral items to communicate issues related to "Share the Road" etiquette for bicyclists and motorists, and to reduce conflicts between pedestrians and bicyclists on shared-use Rail-to-Trails paths.
- Review and update the Easton Bicycle and Pedestrian Plan in conjunction with updates to the Easton Comprehensive Plan.

 Objective 3: Institute new policies and procedures to support Bicycle Plan goals.

Initiatives:

- Utilize national and state resources to guide bicycle facility design and application in the Town of Easton's Department of Planning and Zoning, Department of Public Works, the Building Department and other agencies. (see Resources and References on page 26).
- Build internal capacity to design and implement bicycle facilities by providing ongoing training for Town of Easton staff.
- Improve the reporting and analysis of bicycle crashes to suggest appropriate engineering, encouragement and enforcement countermeasures.
- Adopt policy requiring new development to mitigate traffic impact by providing bicycle facilities or contributing to a fund which is dedicated for bicycle facilities and improvements.
- Objective 4: Update street repair and maintenance practices to ensure bicyclists safety and comfort.
   Initiatives:
  - Develop procedures for maintaining public bicycle facilities.
  - Establish bicycle-related improvement request system through the Town of Easton Web site.
  - Update specifications for routine and emergency street resurfacing and repair to ensure safe traveling routes and surfaces for bicyclists.

#### **Bicycling Access: Levels of Quality**

#### **On-Street Bicycle Lanes**

Bicycle lanes provide a dedicated space on the roadway for one-way bicycle travel and encourage predictable movement. Widths of 5 to 6 feet are most comfortable. Narrow bike lanes next to parking are not preferred. Bicycle lanes are best on streets with heavy traffic, arterials and boulevards.

#### **Crossings and Intersections**

Bicycle markings are generally not carried through intersections or across pedestrian crosswalks.

However, "bicycle boxes" help protect bicycles at intersections by cueing them to the front of traffic. These boxes also provide added buffer for pedestrians. Short traffic signal cycles benefit both bicyclists and pedestrians. Bicycle lanes may be colorized for safety in conflict areas around intersections. Where key bicycle connections exist in parking lots, lanes may be designated but must be maintained often.

#### **Shared Lane Markings, Signage and Bicycle Routes**

Shared lane markings ("sharrows") are placed in a travel lane to encourage bicycles to ride outside the door zone of parked cars. Bicycle routes are



**Bay Street** – heavily traveled for access to town center and Route 33 - offers roadway space for bicycle travel that comes

& goes creating a dangerous situation for motorists & cyclists.

designated on streets too narrow for bicycle lanes but good for bicycling. New bicycle route signs show directions and distance. They are placed only at decision points. Bicycle routes should not lead bicyclists onto sidewalks, particularly against the flow of traffic.

#### **Shared Use Paths**

Shared use paths often parallel high-speed roads in access controlled environments. Paths can provide scenic and direct routes of travel. Widths can vary but must accommodate many users and modes. Where paths intersect with roadways, ramps and signage should be provided. Grade separated crossings are often huge obstacles – bridges may be too narrow and tunnels can be intimidating if poorly designed and/or maintained improperly.

#### **Parking**

Bicycle racks should support a bicycle in at least two places, allowing the frame and wheels to be locked using a U-lock or cable lock. An "inverted U" is the preferred rack. Racks should prevent the wheel of a bicycle from tipping and be durable and securely anchored. Racks should be placed in visible locations (covered if possible) and should not impede pedestrian traffic. Racks should be located 36" away from either parallel or perpendicular walls.

#### PROPOSED BIKEWAYS

A system of bicycle lanes and off-road paths that serve as connectors to existing Talbot County bikeways, improve safety for cyclists and pedestrians, and serve multiple Easton destinations.

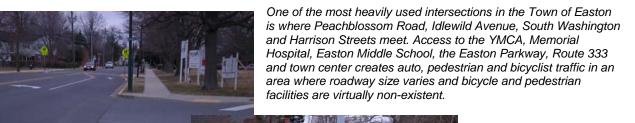
#### Phase One

Location	Intersects/Connects	Destinations
Glebe Road	State Road 33 via 370	Lowe's Plaza
	Goldsborough Neck Road	Target Plaza
	North Washington Street	Commerce Parks
	Easton Parkway	
Bay Street	North Washington Street	Target Plaza
	State Road 33	Easton Village
	Easton Parkway	Safeway
		TCF Library
Aurora Street	Rails-to-Trails	Town Center
	North Washington Street	Thompson Park
	Dover Street	Memorial Hospital
	Goldsborough Street	Idlewild Park
	Idlewild Avenue	
	Brookletts Avenue	
	Dutchman's Lane	
North Washington Street	Rails-to-Trails Start/End Point	North Easton Park
	Glebe Road	Community Center
		Adkins's Children's Center
		Airport Industrial Park

		Town Center TalbotTown
Peach Blossom Road	State Road 333 Easton Parkway Idlewild Avenue	Easton Middle School YMCA of Talbot County Easton Club (West) Cooke's Hope
Dutchman's Lane	South Washington Street Rails-to-Trails Start/End Point Dover Road (East) Dover Neck/Manadier	Easton High School Medical Facilities William Hill Manor Easton Club East Stoney Ridge
Chapel Road	North Washington Street Rails-to-Trails Black Dog Alley	Town Center Chapel District Elementary Easton Commons

### Phase Two

Location	Intersects/Connects	Destinations
Goldsborough Street	South Washington Street Matthewstown Road Black Dog Alley	Giant/Walmart Plaza Matthewstown Run Bretridge Miller's Run
Brookletts Avenue	Aurora Street South Washington Street Rails-to-Trails	SS Peter & Paul School Senior Center Memorial Hospital Town Center
Marlboro Avenue	North Washington Street Easton Parkway Route 33 and Glebe Road	Multiple shopping plazas Easton Village Talbot Town Town Center
Glenwood Avenue	North Washington Street	Easton Elementary School Adkins's Children's Center Moton Park Town Center
Black Dog Alley	Cordova Road Chapel Road Matthewstown Road Dover Road	Easton Common Giant/Walmart Plaza Matthewstown Run Bretridge Miller's Run Easton Club East



#### **EVALUATION AND BENCHMARKS: Bicycling**

Quantitative benchmarks make it possible to carry out a continuous assessment and annual evaluation. It should

be noted though that many of these benchmarks are beyond the Town of Easton's ability to influence and others may become difficult to achieve during slow economic times. They are intended to represent milestones against which to measure success. Therefore, the following benchmarks for bicycling are intended as targets that the Town will strive to achieve subject to fiscal constraints and grant availibility:

- The Town of Easton will establish a system for counting the average number of people bicycling for transportation and recreation in Easton in 2010 and the number shall increase 5 percent annually through 2015 and 10 percent annually through 2020.
- More than 50 percent of elementary and middle school aged children will receive bicycle safety education by 2015 and more than 75 percent by 2020.
- Working with the Easton Public Schools, Easton will establish a system for counting the number of children who bicycle to school in 2010 and the number of children bicycling to school shall increase 5 percent annually through 2015 and 10 percent annually through 2020.
- The number of bicycle-motor vehicle crashes and bicycle-pedestrian crashes will decrease annually in proportion to an increase in bicycling activity.
- The proposed bikeway network will be 50 percent complete by 2015 and 100 percent complete by 2020.

- The Town of Easton will begin a log of maintenance requests related to its bikeways network, post the log online for public viewing and seek to reduce its maintenance backlog by a number to be determined.
- The City will add at least 10 new bicycle parking racks by 2015 and have a total of at least 25 new bicycle parking racks by 2020. In all new development, bicycle parking will be introduced at a rate of 1:10 (at least one bicycle parking space will exist for every 10 vehicular spaces).
- Bi-annual special events in spring and fall will be held in the Town of Easton to encourage bicycle use.
- All town-sponsored special events and public recreational facilities will supply plentiful, safe bicycle parking.

#### **GOALS, OBJECTIVES AND INITIATIVES: PEDESTRIAN ACCESS**

As was stated in the bicycling goals, objectives, and initiatives, the following list of goals and objectives should be pursued by the Town subject to funding availability:

**Mission:** To improve the quality of the walking environment in the Town of Easton so that any trip can be taken on foot safely and comfortably, and where roadways equally serve pedestrians, bicyclists and motorists.

Goal 1 - ENGINEERING: Provide guidelines and standards for physical improvements that will make walking safer, easier, and more attractive to residents and visitors in the Town of Easton.

- Objective 1: Develop and maintain a pedestrian circulation system. Initiatives:
  - Coordinate planning, design, and implementation of a pedestrian system with other city plans.
  - Include sidewalks and trails that provide direct, continuous, and safe movement within and between neighborhoods in all street resurfacing, reconstruction, and streetscape projects, including infrastructure accessibility improvements for those with mobility impairments.
  - Link neighborhoods to the center of Easton, major activity centers, transit stops, schools, parks, and other neighborhoods through a connected network that enables children and adults to walk comfortably between destinations.
  - Give priority to maintenance and filling gaps in the sidewalk network that currently exists on arterial and collector roadways.

- Work with residents, community groups, businesses, civic associations and all property owners to expand the network of walkways on existing public rights-of-way and in new acquisitions of open space.
- Create a checklist-style system that encourages connectivity and universal access in all new developments and for use in all development site review plans.
- Coordinate planning, design, and implementation of pedestrian system improvements near the town line with adjacent communities.

## • Objective 2: Improve pedestrian safety and provide better service at street crossings.

#### Initiatives:

- Ensure that the minimum unobstructed clear width of new sidewalks is context-sensitive but never less than five feet in width even in the most restrictive environments.
- Provide accessible curb ramps, pedestrian signals, countdown timers, and reduce vehicular phases to provide pedestrian intervals long enough for children, older adults and persons with disabilities.
- o Ensure that street furniture, dining areas, landscaping and utilities are compatible and complementary to adjacent sidewalks.
- Actively work with property and business owners to maintain accessible, unobstructed sidewalks.

## • Objective 3: Continue to develop off-road multi-use paths to create a connected trail system.

#### Initiatives:

- o Improve access to Rails-to-Trails pathways via sidewalk system.
- Support ongoing Rails-to-Trails pathways development through Easton via Town of Easton Parks and Recreation and work to connect to a County wide system in cooperation with Talbot County Parks and Recreation.

Goal 2 – EDUCATION AND ENCOURAGEMENT: Support walking as an alternative to motor vehicles as beneficial exercise, an economical form of transportation, and as a benefit to the community.

## • Objective 1: Promote walking as a means of improving health and active lifestyles.

#### Initiatives:

- Coordinate across Town of Easton departments and with partners such as the YMCA, the Talbot County Health Department and Shore Health System to educate the public regarding the health benefits of walking and how people can better integrate walking into their daily lives.
- Support new community events and activities that promote walking and multimodal transportation initiatives.
- Provide formal and informal activity-oriented programs such as community workshops and educational programs to specifically encourage the relationship between walking and public health.

- See Awareness and Education Program Ideas on page 28 for additional initiatives.
- Objective 2: Develop programs and awareness initiatives that address pedestrian access, safety, rights and responsibilities.
   Initiatives:
  - Utilize "Street Smart" resources to develop a pedestrian education program.
  - Use the "Safe Routes to School" program in public and private schools to educate school children about safe walking practices.
  - Publicize the pedestrian network via the Town of Easton and County Tourism Web sites, on MCTV and through distribution of maps and booklets.
  - Work with the Talbot County Health Department to monitor current health trends and identify sources of private funding that may be directed to local initiatives.
  - See Awareness and Education Program Ideas on page 28 for additional initiatives.

Goal 3 – ENFORCEMENT AND SAFETY: Create a safe pedestrian environment through effective law enforcement, detailed incident analysis and implementation of safety countermeasures.

Objective 1: Improve enforcement of traffic laws related to pedestrian access.

#### Initiatives:

- Partner with the Easton Police Department to monitor areas of pedestrian concern and ensure that officers understand pedestrian issues as well as pedestrian rights and responsibilities.
- o Identify the most common conflicting movements between pedestrians, bicyclists and motor vehicle users and determine enforcement mechanisms to mitigate these conflicts.
- Focus law enforcement efforts on safety violations by pedestrians, including jaywalking and proceeding against DON'T WALK signals.
- Objective 2: Create structure to implement the Pedestrian Access Plan goals and objectives.

#### Initiatives:

- Fund a part-time Bicycle & Pedestrian Coordinator (or possibly use interns)
  who will work with residents, community groups, businesses, civic
  associations, property owners and Town of Easton departments to implement
  this plan.
- Solicit input on pedestrian problems via annual reports from the Easton Police Department to the Easton Town Council, continuously through the Town of Easton's Web site, and quarterly through a community forum.
- Use targeted outreach programs and collateral items to communicate issues to reduce conflicts between pedestrians and motorists, and pedestrians and bicyclists on roadways and shared-use paths.

- Review and update the Easton Bicycle and Pedestrian Plan in conjunction with updates to the Easton Comprehensive Plan.
- Objective 3: Institute new policies and procedures to support Pedestrian Access Plan goals and objectives.
   Initiatives:
  - Utilize national and state resources to guide pedestrian access facilities design and application in the Town of Easton's Department of Planning and Zoning, Department of Public Works, the Building Department and other agencies (see Resources and References on page 26).
  - Build internal capacity to design and implement pedestrian access facilities by providing ongoing training for Town of Easton staff.
  - Improve the reporting and analysis of pedestrian issues and fatalities to suggest appropriate engineering, encouragement and enforcement countermeasures.
  - Adopt policy requiring new development to mitigate traffic impact by providing pedestrian facilities or contributing to a fund which is dedicated for pedestrian facilities and improvements.
- Objective 3: Update sidewalk and trail repair and maintenance practices to ensure pedestrians safety and comfort.
   Initiatives:
  - o Develop procedures for maintaining public pedestrian access facilities.
  - Establish pedestrian-related improvement request system through the Town of Easton Web site.
  - Update specifications for routine and emergency street resurfacing and repair to ensure safe traveling routes and surfaces for pedestrians.

#### **Pedestrian Access: Levels of Quality**

#### Sidewalks

Walkability increases with added width (five feet is a minimum). Greater width is needed when street furniture, utilities, dining areas or signs intrude on the "clear" space. Sidewalks should have clean edges and buffers to the street – either vegetation or parked cars. They should not pass long, blank walls without breaks or details. Sidewalk material should be firm, stable and slip resistant with no interruptions in grade. Conditions improve as the number of driveways is reduced. Curbs should be non-mountable or separated from the sidewalk by a wide planting strip.

#### Crossings

Crossings should occur at well-marked crosswalks, with pedestrian signals if appropriate. Short signal cycles provide clear pedestrian priority. ADA accessible curb ramps are essential – preferably two per corner and oriented at perpendicular crosswalks. Tight curb radii (15 to 20') forces traffic to slow. Curb extensions may be appropriate, particularly mid-block. Stop bars can be set back and enhanced signing or

lighting can be used selectively for added attention. On multi-lane roads, refuge islands are essential.

#### **Main Streets**

Walkways along "main" streets should be wide and clear, particularly in shopping areas. Front doors should open to the street, not parking lots. Blocks should be short – typically 300 feet with a 1,200 foot perimeter – so that people may cross frequently. Most people will walk 150 feet to get to locations rewarding their travel. Context-sensitive lighting and street furniture are essential. Street trees provide shade and street character.

#### **Local Streets**

Local streets should be narrow and well-landscaped with on-street parking to act as additional sidewalk buffer. Driving speeds of 15-20 mph are best and 20-25 mph is acceptable\*. Lanes should be narrow and designed to encourage slow vehicular movement. Traffic calming may slow traffic and encourage pedestrian activity.

#### Avenue/Boulevard

Sidewalks along arterials should be wide and well buffered since these streets provide key transit access. Planter strips and bicycle lanes create essential separation from vehicles. Street trees, other landscaping and medians help slow motorists. Longer pedestrian crossings should be broken into separate threats. Median crossings or refuges (4' minimum, 8-10' preferred) can be angled forcing people to look at motorists before stepping into their path.

<sup>\*</sup>Pedestrians hit by a vehicle traveling 20 mph have a 5% fatality rate. If a pedestrian is hit by a vehicle traveling 30 mph, they have a 40% fatality rate; and a pedestrian hit by a vehicle traveling 40 mph results in a 95% fatality rate. (Source: City of Portland, Office of Transportation, Portland, Oregon)





The intersection of North Washington Street and Aurora offers a challenging situation for motorists, bicyclists and pedestrians alike due to road width, no crosswalks, bicycle lane markings or signage.

#### PROPOSED PEDESTRIAN SYSTEM

#### Phase One

Location	Improvements	Destinations
North Washington Street	Sidewalk continuity to the Easton Parkway  Crosswalks at North	North Easton Park Community Center Rails-to-Trails Adkins's Children's Center
	Washington and Aurora Streets	Airport Industrial Park Town Center
Marlboro Avenue	Sidewalk continuity on both sides  Crosswalks at East and West ends; crosswalks with	Multiple shopping plazas Town Center
	pedestrian signals at Easton Parkway	
Aurora Street	Sidewalk continuity from Dutchman's Lane to North Washington Street  Crosswalks at all major intersections (Dutchman's Idlewild, Dover, Golds- borough, Creamery Lane, North Washington)	Town Center Thompson Park Memorial Hospital Idlewild Park William Hill Manor Medical Facilities
Idlewild Park "5 corners"	Sidewalk continuity from Peachblossom - East onto Idlewild Avenue Crosswalks with pedestrian	Easton Middle School YMCA of Talbot County Idlewild Park Rails-to-Trails Town Center
	signals at 5-way intersection	Easton Club (West)

Brookletts Avenue	Sidewalk continuity from	SS Peter & Paul School
	North Washington Street to	Senior Center
	Tred Avon Avenue	Rails-to-Trails
		Memorial Hospital
	Crosswalks at major	Town Center
	intersections (South	
	Washington, Aurora, Tred	
	Avon)	



Brookletts Avenue has sidewalks that vary in size and levels of quality. The walkways alternate from one side of the street to the other forcing pedestrians to cross for access or to use the roadway. The final block of Brookletts Avenue (at the East end) has no sidewalk at all forcing pedestrians into the street as the road curves.



#### **Phase Two**

Port Street	Sidewalk continuity from South Washington West to end  Crosswalks at all major intersections (near South Washington, West Street, Easton Parkway)	Town Center Talbot County Library Residential Communities Community Services Center Waterfront
Chapel Road	Sidewalk continuity from North Washington Street to Route 50	Town Center Rail-to-Trails
Mecklenburg Avenue	Sidewalk continuity on the East side	Easton High School William Hill Manor Parkside Medical Facilities
Stoney Ridge	Sidewalks in early phase of this subdivision (none at this time)	Community Facilities

#### **EVALUATION AND BENCHMARKS: Pedestrian Access**

Quantitative benchmarks make it possible to carry out a continuous assessment and annual evaluation. Within reasonable fiscal limitations, the Town should strive to acheive the following benchmarks:

- The Town of Easton will establish a system for counting the average number of people walking for transportation and recreation in Easton in 2010, and the number shall increase 5 percent annually through 2015 and 10 percent annually through 2020.
- More than 50 percent of elementary and middle school aged children will receive pedestrian safety education by 2015 and more than 75 percent by 2020.
- Working with the Easton Public Schools, Easton will establish a system for counting the number of children who walk to school and the number of children walking to school shall increase 5 percent annually by 2015 and 10 percent annually through 2020.
- The number of pedestrian-motor vehicle crashes (10 in 2006, 8 in 2007, 8 in 2008; see Appendix II) and pedestrian-bicycle crashes will decrease annually through 2015.
- The proposed pedestrian access network will be 50 percent complete by 2015 and 100 percent complete by 2020.
- The Town of Easton will begin a log of maintenance requests related to its
  pedestrian access network, post the log online for public viewing and seek to
  reduce its maintenance backlog by a number to be determined.
- Bi-annual special events in spring and fall will be held in the Town of Easton to encourage walking for transportation and recreation.

#### **ADDITIONAL CONSIDERATIONS**

#### **Major Barriers**

Easton's town center is situated between two significantly high-speed roadways – namely Route 50 and the Easton Parkway. These substantial physical barriers separate residential, tourism and commercial areas, and may deter residents and visitors from utilizing bicycle and pedestrian networks. In fact, safety concerns may put town center out-of-reach for many as a destination.

One way of overcoming these roadway barriers is through physical improvements such as a pedestrian and bicycle bridge, overpass or underpass. Bridges and overpasses are best suited in areas where the topography allows for a structure without ramps. Underpasses work best when they can be designed to feel open, well-lit and safe. While these options may be an expensive part of the bicycle and pedestrian system, they can substantially increase the use of street and path networks, and should be accessible to



all pedestrians, including those in wheelchairs. Further, a custom-designed structure is not the only solution as a number of companies design and build prefabricated bridges to customers' specifications to serve a wide variety of needs.

Temporary solutions should include these roadway improvements to address some of the major safety issues for pedestrians and bicyclists on Route 50 and the Easton Parkway. The following temporary measures should be considered by the Town for utilization on these busy highways until a more permanent solution can be achieved:

#### Bicyclist safety countermeasures

- Designate crossings
  - Install bike lane striping at the near side cross street property line then
    resume at the far side property line. Extend dotted guidelines through
    particularly complex intersections. Standard bicycle symbols should be
    painted on the far side of each intersection.
  - Efforts should be made to ensure that signal detection devices are capable of detecting a bicycle and that the total green plus clearance time (yellow plus all-red) is sufficient for the bicyclist to cross the intersection safely.
  - Use "Bicycle Crossing" warning signs, which alert oncoming traffic to bicyclists on the roadway.
  - Consider restricting right-turn-on-red for motor vehicles.

#### Pedestrian safety countermeasures

- Make crosswalk improvements
  - Use a ladder or cross-hatched pattern that is more visible to motorists.
  - Use "Pedestrian Crossing" warning signs with pedestrian-actuated flashing beacons, which alert oncoming traffic to pedestrians in the crosswalk.
  - Move the vehicle STOP line farther back from crosswalk AND add STOP HERE FOR PEDESTRIANS sign.
  - Install raised crosswalks.
  - Use in-pavement lights to alert motorists to the presence of a pedestrian crossing or when someone is preparing to cross the street.
  - Reassess traffic signal operations, including consideration of pedestrian walking speeds/pedestrian signal timing.
  - o Install pedestrian countdown signals at every traffic signal.
  - Consider restricting right-turn-on-red for motor vehicles.



Large intersection with multiple crossings - note three sets of saw-tooth markings: one for pedestrians, one for cyclists, and one for vehicles.

#### **Rails-to-Trails Expansion**

Rail-trails can be enjoyed by residents and visitors of all ages for a range of activities from bicycle riding to leisurely walks to bird watching. The Town of Easton should continue to work with Talbot County and extend the Rails-to-Trails wherever possible to continue to raise the quality of life for Easton's residents as well as increase tourism and tourism-based businesses.

Based on funding availability, extension priorities may include:

- A trail to the western region toward St. Michaels via Easton Village, including utilization of funding available to construct a pedestrian bridge across the waterway;
- A trail to the eastern region toward Cordova following the eastern boundary of the former RTC property that was acquired by the Town of Easton in 1996;

 Construction of trail segments within new community developments as a condition of residential and commercial project approval where planned rail-trails infrastructure exists.

Coordination between Town of Easton Parks and Recreation, the Planning and Zoning Commission, Town Council and Talbot County Parks and Recreation will insure a formal infrastructure system is in place and prevent duplication of time and services.

#### **RESOURCES AND REFERENCES**

American Association of State Highway and Transportation Officials, "Guide to the Development of Bicycle Facilities." Washington, DC

American Association of State Highway and Transportation Officials, "Guide to the Development of Pedestrian Facilities." Washington, DC

The Baltimore City Department of Transportation, "City of Baltimore Bicycle Master Plan," Baltimore, MD, 2006

Bikes Belong Coalition, Economic Benefits of the Bicycling Industry and Bike Tourism, Boulder, CO

City of Portland, Department of Transportation, "I Share the Road" Pledge Program, Portland, OR

Colorado Department of Transportation, "The Economic Impact of Bicycling in Colorado," Denver, CO

Department of Transportation and Environmental Services, "City of Alexandria Comprehensive Transportation Master Plan," Alexandria, VA, March 2008

League of American Bicyclists, "Bicycle Friendly Communities - What Are the 5 Es?," Washington, DC

Maine Department of Transportation, "Bicycle Tourism in Maine: Economic Impacts and Marketing Recommendations," Augusta, ME

Maryland Department of Transportation, "Maryland's 20-Year Statewide Bicycle and Pedestrian Access Master Plan," Hanover, MD, 2002

Maryland Department of Transportation, "Reference Guide to Federal and State Bicycle and Pedestrian Laws and Policies," Hanover, MD, 2007

Montgomery County Department of Park and Planning, The Maryland-National Capital Park and Planning Commission, "Countywide Bikeways Functional Master Plan," Silver Spring, Maryland, March 2005

National Capital Region Transportation Planning Board, Street Smart Public Safety Program, Washington, DC

National Center for Safe Routes to School, "Safe Routes to School Online Guide," University of North Carolina Highway Safety Research Center, August 2006

National Complete Streets Coalition, "Complete Streets Spark Economic Revitalization" and "Complete Streets Lower Transportation Costs", Washington, DC

North Carolina Department of Transportation, Division of Bicycle and Pedestrian Transportation, "Pathways to Prosperity: Economic Impact of Investing in Bicycle Facilities: A Case Study," Raleigh, NC

One World, Two Wheels, http://www.1world2wheels.org/get-involved, Trek Bicycle Corporation, Waterloo, WI

Pedestrian and Bicycle Information Center, University of North Carolina Highway Safety Research Center, Chapel Hill, NC

Talbot County Office of Tourism and Talbot County Parks and Recreation, "Bike Talbot County," http://www.tourtalbot.org/PDFs/talbot\_county\_bicycle\_map.pdf, Easton, MD

U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices," Washington, DC: U.S. DOT, FHWA, 2003.

#### **APPENDIX I: Awareness and Education Program Ideas**

- Utilize local media (WCEI, MCTV, Star Democrat, Easton Update, Midshore.net) for a bicycle and pedestrian safety campaign, including "road etiquette".
- Distribute existing bicycle and pedestrian safety brochures in high-travel areas for both residents and visitors\*.
- Establish a citizen/volunteer bike and pedestrian patrol to keep watch over city bike routes and multi-use trails.
- Ensure that bicycle riding safety and skill classes are available at low cost for children and adults of all ages.
- Implement a valet bike parking program at major events in Easton such as the July 4<sup>th</sup> multi-day celebration and the Waterfowl Festival.
- Develop an "I Share the Road" program for drivers, pedestrians and bicyclists.
- Create a section on the Town of Easton Web site on transportation options including the means to report road and trail safety issues.
- Launch a "Sunday Parkways" program to open space to walkers and bicyclists, not motorized vehicles, utilizing the Rail-to-Trail pathways and roadways.
- Coordinate with Maryland's Safe Routes to School Program Coordinator to begin a local program.
- Plan a "Walk to School Day" in October in conjunction with International Walk to School Day. Last year, 40 countries participated in the event, and in the United States, 2,756 schools from all 50 states participated.
- May is National Bike Month organize a Bike to Work and Bike to School Day event.
- Expand the "Historic Tour of Easton" walking or driving tour to include a bicycling option.

<sup>\*</sup>Published materials are available free-of-charge or at minimal cost from the Maryland State Highway Administration, the Maryland Department of Transportation, the National Highway Traffic Safety Administration, and other federal, state and advocacy organizations.

# **APPENDIX II: Town of Easton – Reported Bicycle and Pedestrian Accidents** Source: Easton Police Department, 2/19/09

<u>Year</u>	Pedestrian Accidents	Bicycle Accidents
2001	Dover & Washington Marlboro & Route 322 Hammond & Floyd Lane Port Street & West Street Dover Road & Doverbrook Giant Parking Lot	Tred Avon Ave & Front Lane East Ave & Powel's Alley South St & S. Hanson St Dover Road & Elliott Road Church of God Parking Lot N. Washington & Lynnbrook Ct N. Washington & Glebe Road
2002	Walmart Parking Lot Needwood Ave & Choptank Scotts Alley & Merrick Lane Easton Plaza Parking Lot Dover St & Locust Lane N. Washington St & Village St Marlboro Ave @McDonald's Corbin Pkwy & Francis St Marlboro Ave & Glebe Rd Super Soda Parking Lot Tred Avon Ave & Dover St (Fatality)	East Ave & Goldsborough North St & Turner Lane Brookletts Ave & East Ave Port St & Meadow Dr Chapel Rd & Route 50 (Fatality)
2003	Walmart Parking Lot Easton Middle School Parking Lot Dover Rd & Route 50 Lowes Parking Lot	Port Street & Pleasant Alley N. Washington & Village St S. Washington & Dutchman's Ln
2004	Station Ln & Wilson Alley Dover St & Locust Ln Clearview & Route 50 Walmart Parking Lot N. Washington St & Wrightson Ave	N. Washington & SE Dukes St Locust Ln & South Ln Cherry St & N. Aurora St Glenwood Ave & Pleasant Idlewild Ave & S. Aurora St
2005	Brookletts Ave & Hanson St Food Lion Parking Lot Aurora St & South Street Doverbrook Teal Drive	South Ln & Locust Ln Goldsborough & Harrison Route 333 & Tour Drive Route 322 & Glenwood Ave Dover Rd & Choptank Ave Goldsborough & Calvert St
2006	Exxon Parking Lot Oasis Car Wash Marlboro Ave Giant Parking Lot Super Soda Parking Lot N. Aurora & August St Food Lion Parking Lot Francis St & Will St Golden Corral Parking Lot Sunoco Parking Lot	Dutchman's Lane N. Washington St & N. Harrison Dutchman's La & S. Aurora Talbot Town Parking Lot Route 322 & Peachblossom
2007	Dover St & Harrison St N. Washington & Goldsborough St	Dutchman's Ln & Route 50 (Fatality) Peebles Parking Lot

Londonderry Place Port St & Pleasant Alley Brookletts Ave & Tred Avon Ave

Lowes Parking Lot

Dover St & Higgins St N. Washington St & Chapel Rd Goldsborough & Locust St Jowite St & Moton St Peachblossom Rd

Route 322 & Marlboro Ave Glenwood Ave & Jowite St

2008 Dover Rd & Rails to Trails

Idlewild Ave & Hanson St Route 50 & Kennedy St Dover St & Aurora St Green Turtle Parking Lot S. Washington & Port St East Avenue & Smiths Alley

Walmart Parking Lot

2009 Route 322 & Marlboro Ave

None reported.\*

\*NOTE: 2008 - Incident reported on Route 333 opposite the main entrance to The Easton Club. Bicyclist avoided collision with driver using bicycle lane as a passing lane.